CBR-980

Wireless-N Broadband Router

User Manual

Version 1.0
(Dec, 2009)

Table of Contents

TABLE OF CONTENTS 2

PREFACE 5

CHAPTER 1 INTRODUCTION 6

1.1 About CBR-980 6
1.2 Main Features 6
1.3 System Requirements 6
1.4 Getting to Know CBR-980 7
1.4.1 Product Appearance 8
1.4.2 Hardware Specifications 8

CHAPTER 2 SYSTEM AND NETWORK SETUP 9

2.1 Build Network Connection 9
2.2 Connecting to CBR-980 by Web Browser 10
2.2.1 Windows 95/98/ME 11
2.2.2 Windows 2000 13
2.2.3 Windows XP 15
2.2.4 Windows Vista 17
2.2.5 Router IP Address Lookup 19
2.2.6 Connect the Wireless Router's management Interface by Web Browser 20

CHAPTER 3 ONE BUTTON SETUP CONFIGURATION 22

CHAPTER 4 QUICK SETUP CONFIGURATION 24

4.1 Step Setup 26
4.1.1 Time Zone Setup 26
4.1.2 LAN Interface Setup 27
4.1.3 WAN Interface Setup 27
4.1.3.1 WAN Interface – 3.5G (HSDPA/UMTS) 27
4.1.3.2 WAN Interface – Ethernet Port 28
4.1.3.3 WAN Access Type – WiMAX 30
4.1.3.4 WAN Access Type – Wireless 30
4.1.3.5 WAN Access Type – Static IP 31
4.1.3.6 WAN Access Type – Dynamic IP 33
4.1.3.7 WAN Access Type – PPPoE 34
4.1.3.8 WAN Access Type -- PPTP 35
4.1.4 Wireless Setup 36
4.1.4.1 Wireless Security Setup 37
4.2 Basic Step Complete 39

CHAPTER 5 ADVANCED CONFIGURATION 40

5.1 IP Configuration 40
5.1.1 WAN Interface Setup 40
5.1.1.1 WAN Interface – 3.5G (HSDPA/UMTS) 41

5.1.1.2 WAN Interface – Ethernet Port 42
5.1.1.3 WAN Interface – WiMAX 43
5.1.1.4 WAN Access Type – Wireless 43
5.1.1.5 WAN Access Type – Static IP 45
5.1.1.6 WAN Access -- Dynamic IP 47
5.1.1.7 WAN Access Type -- PPPoE 49
5.1.1.8 WAN Access Type -- PPTP 52
5.1.2 LAN Interface Setup 55
5.1.3 Dynamic DNS Setting 57
5.2 Wireless Setup 58
5.2.1 Wireless Basic Settings 59
5.2.1.1 Multiple APs 61
5.2.1.2 Enable Universal Repeater Mode (Acting as AP Client simultaneously) 61
5.2.2 Wireless Advanced Settings 62
5.2.3 Wireless Security Setup 64
5.2.4 Wireless Access Control 66
5.2.5 WDS Settings 68
5.2.6 WPS 75
5.3 NAT 83
5.3.1 Visual Server 83
5.3.2 DMZ 84
5.4 Firewall 85
5.4.1 QoS 85
5.4.2 Port Filtering 87
5.4.3 IP Filtering 88
5.4.4 MAC Filtering 89
5.4.5 URL Filtering 90
5.5 System Management 91
5.5.1 Change Password 92
5.5.2 Firmware Upgrade 92
5.5.3 Profile Save 93
5.5.4 Time Zone Setting 97
5.5.5 UPnP Setting 98
5.5.6 Language Setting 99
5.6 Log & Status 100
5.6.1 Network Config 100
5.6.2 Event Log 101
5.7 Logout 102

CHAPTER 6 DDNS ACCOUNT SETUP 103

CHAPTER 7 Q & A 109

7.1 Installation 109
7.2 LED 109
7.3 IP Address 110
7.4 OS Setting 110
7.5 11n Broadband Router Setup 111
7.6 Wireless LAN 113

7.7 Support.....115
7.8 Others.....116
7.9 USB Device 116

Preface

About This Manual

Thank you for purchasing the CBR-980 Wireless-N Broadband Router. This User's Manual is intended for audience with basic networking knowledge and is the primary reference for configuring and maintaining the device. This manual includes description of the management interface and detailed instruction in its use.

Conventions Used

- Notes, warnings or cautions are in bold with shaded background.
- In this manual, the CBR-980 Wireless-N Broadband Router is referred to as "the wireless router".

Chapter 1 Introduction

1.1 About CBR-980

CBR-980 is not only a Wireless-N Router, It also equips with two USB 2.0 hosts to provides users with high-speed WiMAX / 3.5G mobile network, connectivity.

CBR-980 provides Multi-SSIDs for difference network environment and application. For the heavy P2P user that the high efficiency CPU speeds up P2P download with 20,000 sessions.

CBR-980 delivers a perfect all-in-one function and enables your digital home with wireless environment. This is the device easy-to-carry and handy-for-use in Conference Room, Hotel, Coffee Shop and Hot-Spots.

1.2 Main Features

The following lists are the main features of the Wireless Router.

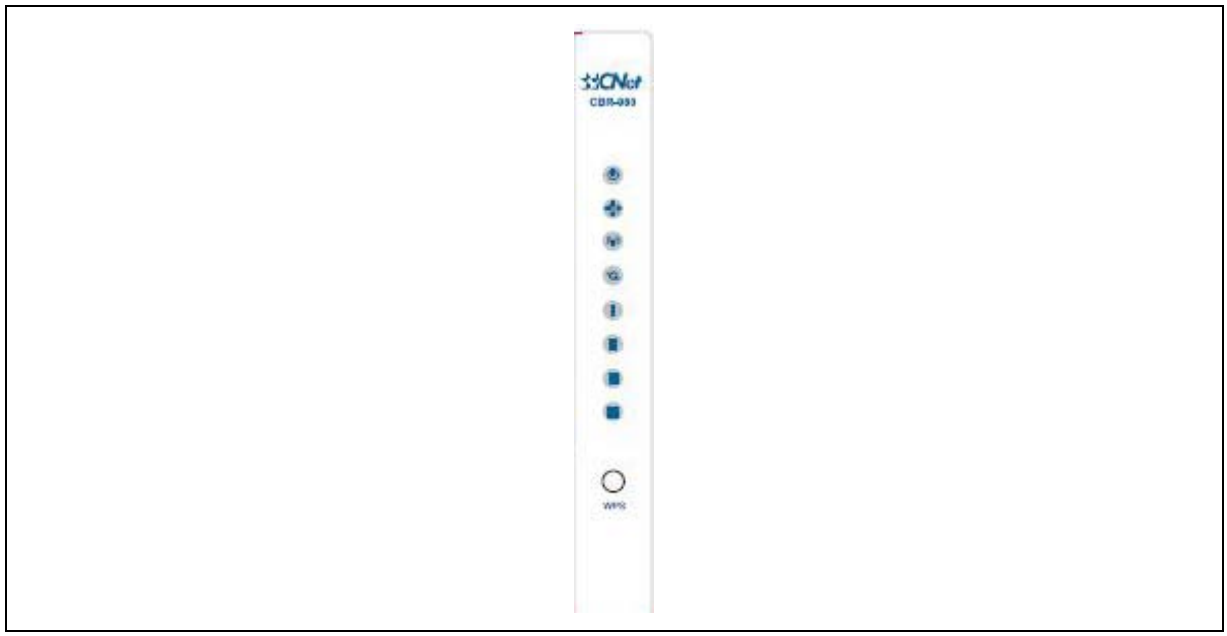
- WiMAX / 3.5G Internet connection
- Support Multiple-APs application (up to 4 SSIDs)
- Support one touch encryption method (WPS) to simplify the secure establishment of a wireless network.
- Supports up to 20,000 session
- Advanced wireless security, supports 64/128 bit WEP / WPA / WPA2 / WPA2 Mixed
- Complies with IEEE 802.11b/g and IEEE 802.11n
- Multi-languages support
- Advanced firewall function and DoS prevention

1.3 System Requirements

- Internet connection, provided by xDSL or cable modem with a RJ-45 Ethernet port.
- Computer or network devices with wired or wireless network interface card.
- Web browser (*Microsoft Internet Explorer 4.0 or above, Netscape Navigator 4.7 or above, Opera web browser, or Safari web browser).*
- An available AC power socket.

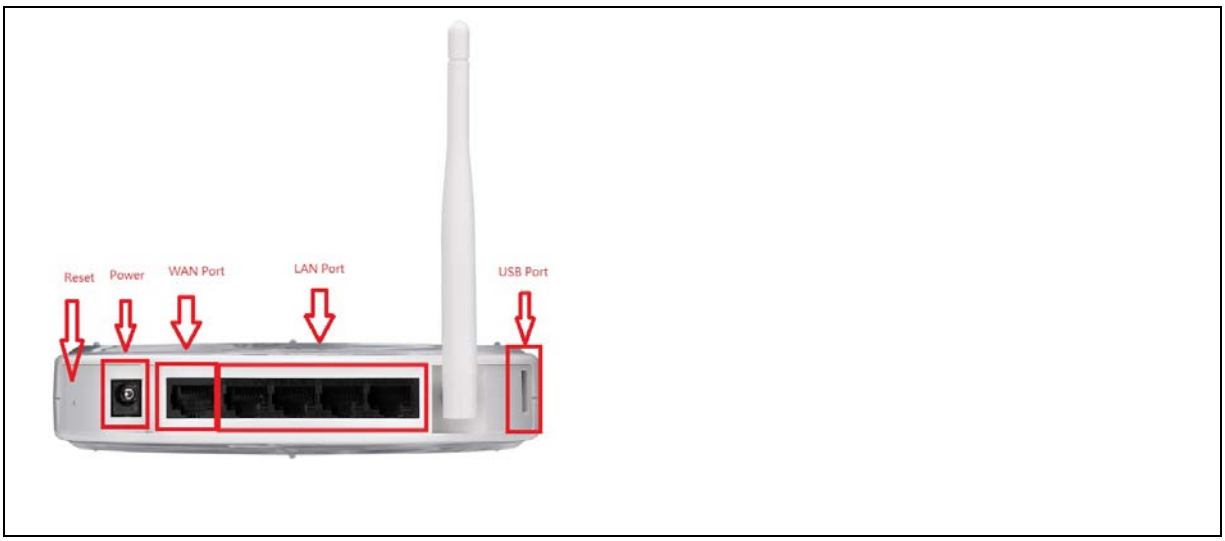
1.4 Getting to Know CBR-980

The front view of CBR-980



Status / LED Indicator	Solid	Flashing
POWER	Operation OK	Power on
STATUS	Operation OK	Green: Reset/Firmware updates in progress
WIRELESS & WPS	Operation OK	Green: Transmitting Data
		Orange: Establishing WPS
WAN	Internet OK	Transmitting Data
LAN	Ethernet OK	Transmitting Data

1.4.1 Product Appearance



Power Receptor	Adapter, Input:90-240Vac, Output: 5V/ 1.2A
Reset Button	Press "**Reset**" button over 10 seconds. When status indicator turns from flashing to solid, the process is completed. All settings are back to default.
Ethernet Port	1x WAN port, 4x LAN ports
USB2.0 Ports	1 USB Ports

1.4.2 Hardware Specifications

The following table shows the technical specifications of the wireless router.

Item	Specifications
Communication Interface	
WAN Port	1 x 10/100Mbps RJ-45, with auto MDI/MDIX
LAN Port	4 x 10/100Mbps RJ-45, with auto MDI/MDIX
Wireless	IEEE 802.11b/g/n
Others	
Operation Requirement	Operating Temp: 0° to 40°C (32° to 10°F) Storage Temp: -20° to 70°C (-4° to 158°F) Operating Humidity: 10% to 85% Non-Condensing Storage Humidity: 5% to 90% Non-Condensing
Sessions	20,000

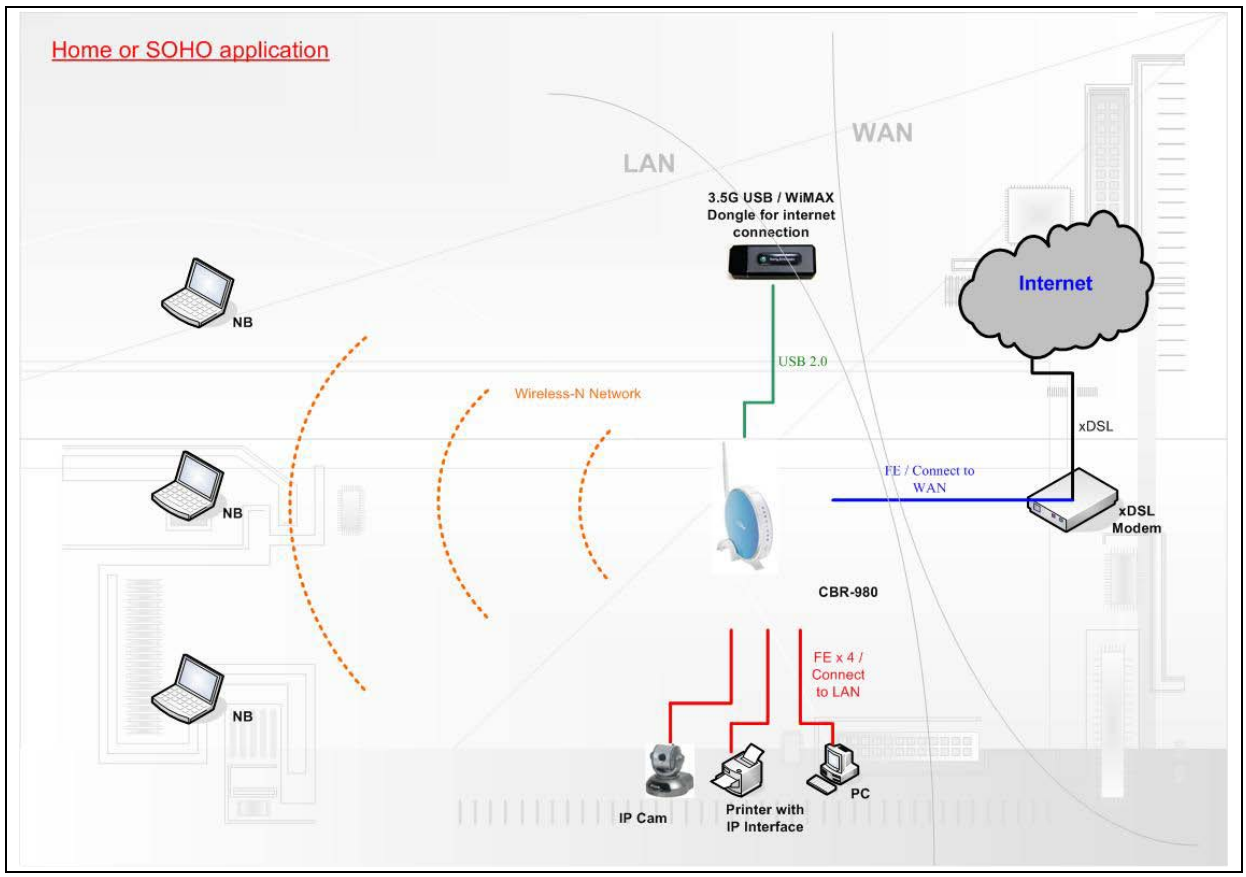
Antenna	Internal x 1, External x 1 (detachable)
Peak Gain of the antenna	2dBi@ 2.45GHz
Transmitted Power	IEEE 802.11b: 19dBm +/- 2.0dBm (typical) IEEE 802.11g: 16dBm +/- 2.0dBm (typical) IEEE 802.11n: 14dBm +/- 1.5dBm (typical)
Receive Sensitivity	IEEE 802.11b: -83dBm +/- 2.0dBm IEEE 802.11g: -70dBm +/- 2.0dBm IEEE 802.11n (20MHz): -74dBm +/- 2.0dBm IEEE 802.11n (20MHz): -74dBm +/- 2.0dBm
Dimension (L x W x H)	150 x 150 x 33mm (5.91 x 5.91 x 12.99inch)
Button	Reboot / Reset button WPS button
Power Supply	Adapt AC 100 ~ 240V / DC 5V, 1.5A output
Certification	CE / FCC / RoHS

Chapter 2 System and Network Setup

The CBR-980 is an easy to setup and wireless device for various application and environment. It can be used in conference room, hotel, even in transportation. The USB port could connect with USB WiMAX / 3.5G dongle.

2.1 Build Network Connection

Administrator can manage the settings for WAN, LAN, Wireless Network, NTP, password, User Accounts, Firewall, QoS, etc.



2.2 Connecting to CBR-980 by Web Browser

After the network connection is built, the next step what you should do is setup the router with proper network parameters, so it can work properly in your network environment.

Before you connect to the wireless router and start configuration procedures, your computer must be able to get an IP address from the wireless router automatically (use dynamic IP address). If it's set to use static IP address, or you're unsure, please follow the below instructions to configure your computer with dynamic IP address:

If the operating system of your computer is….

Windows 95/98/ME - please go to section 2.2.1

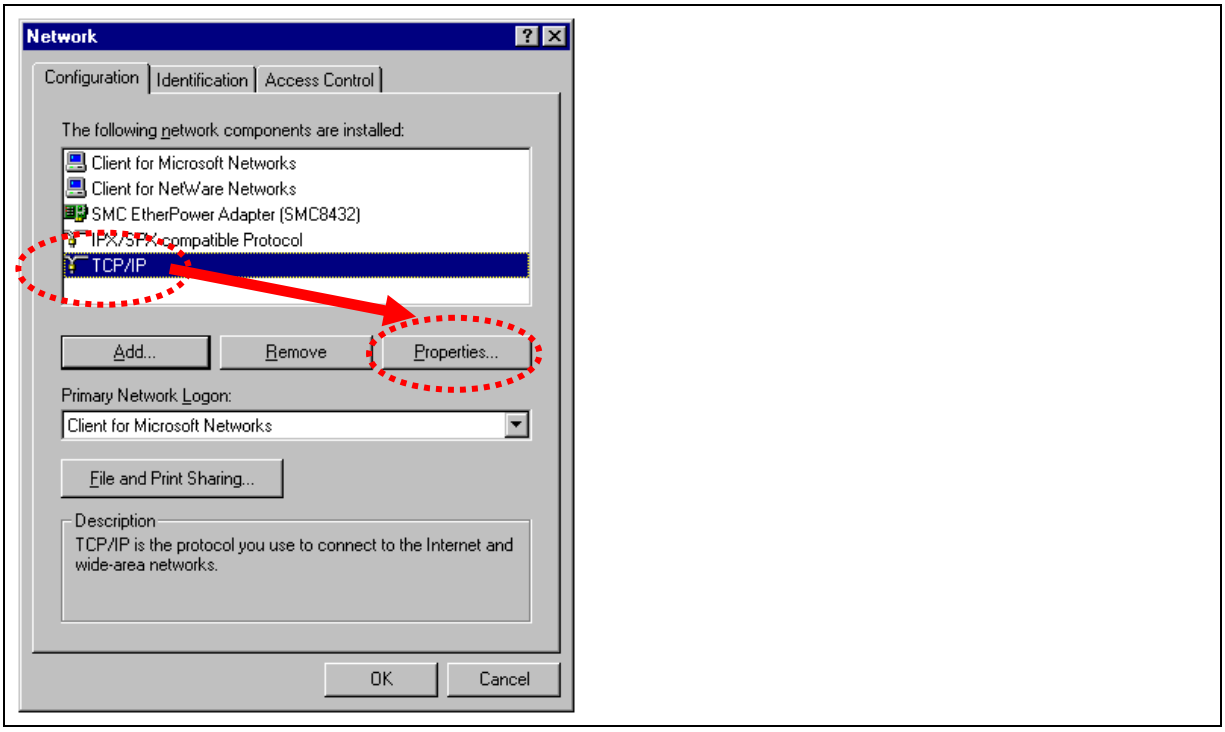
Windows 2000 - please go to section 2.2.2

Windows XP - please go to section 2.3.3

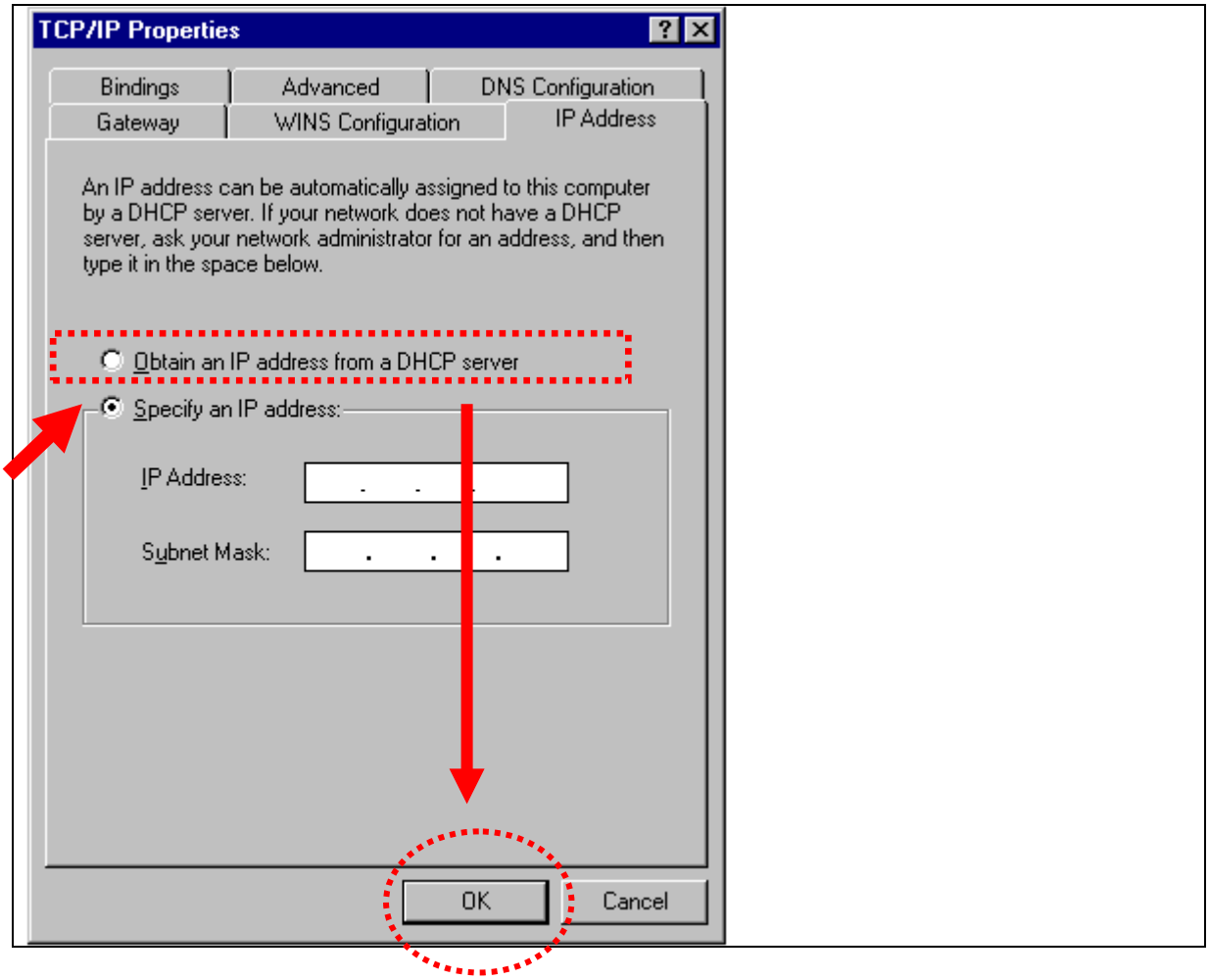
Windows Vista - please go to section 2.3.4

2.2.1 Windows 95/98/ME

1. Click ‘Start’ button (it should be located at lower-left corner of your computer), then click control panel. Double-click ***Network*** icon, and ***Network*** window will appear. Select ‘TCP/IP’, then click ‘Properties’.

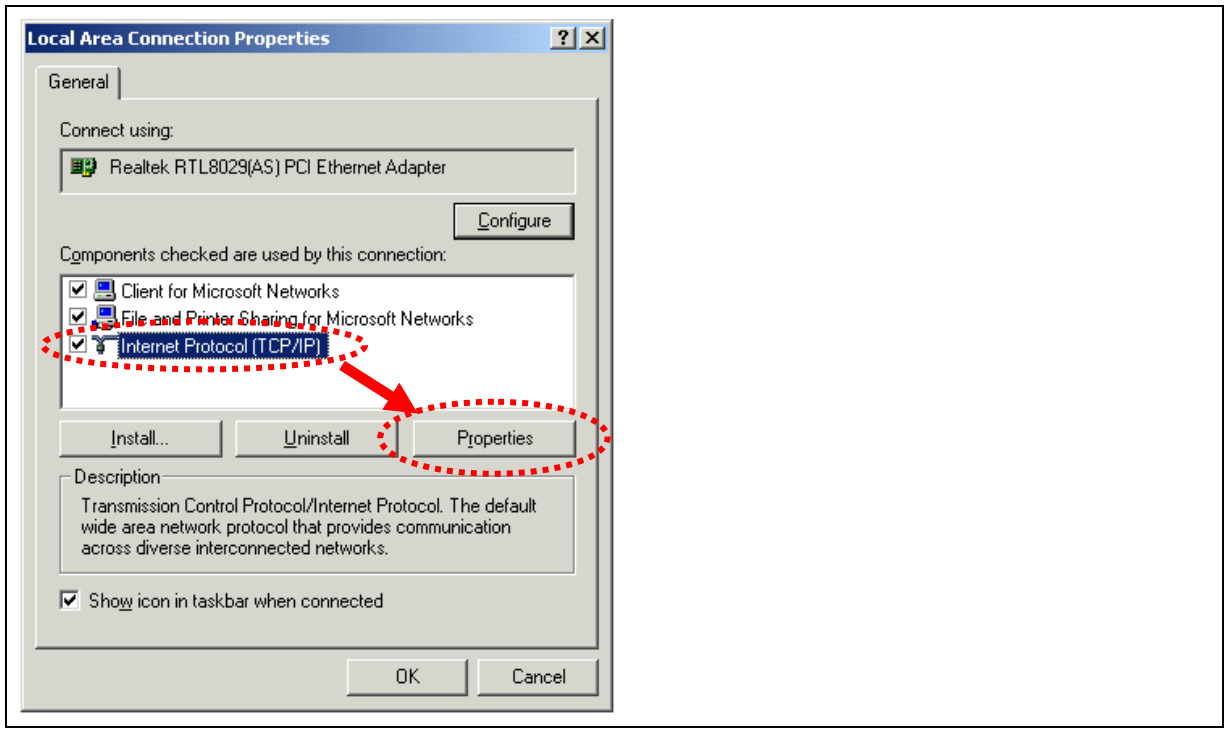


2. Select ‘Obtain an IP address from a DHCP server’, and then click ‘OK’.

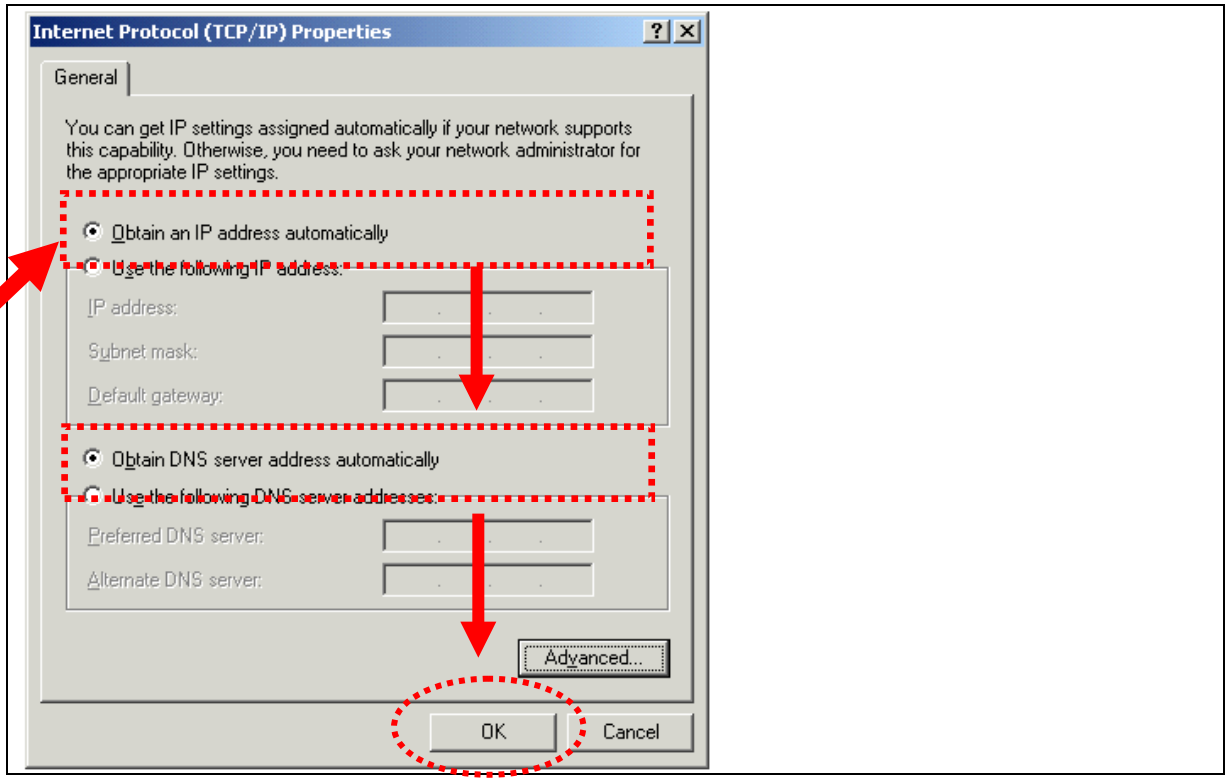

TCP/IP Properties
Bindings
Advanced
DNS Configuration
Gateway
WINS Configuration
IP Address
An IP address can be automatically assigned to this computer by a DHCP server. If your network does not have a DHCP server, ask your network administrator for an address, and then type it in the space below.
Obtain an IP address from a DHCP server
Specify an IP address:
IP Address:
Subnet Mask:
OK
Cancel

2.2.2 Windows 2000

1. Click ‘Start’ button (it should be located at lower-left corner of your computer), then click control panel. Double-click ***Network and Dial-up Connections*** icon, double click ***Local Area Connection,*** and ***Local Area Connection Properties*** window will appear. Select ‘Internet Protocol (TCP/IP)’, then click ‘Properties’.

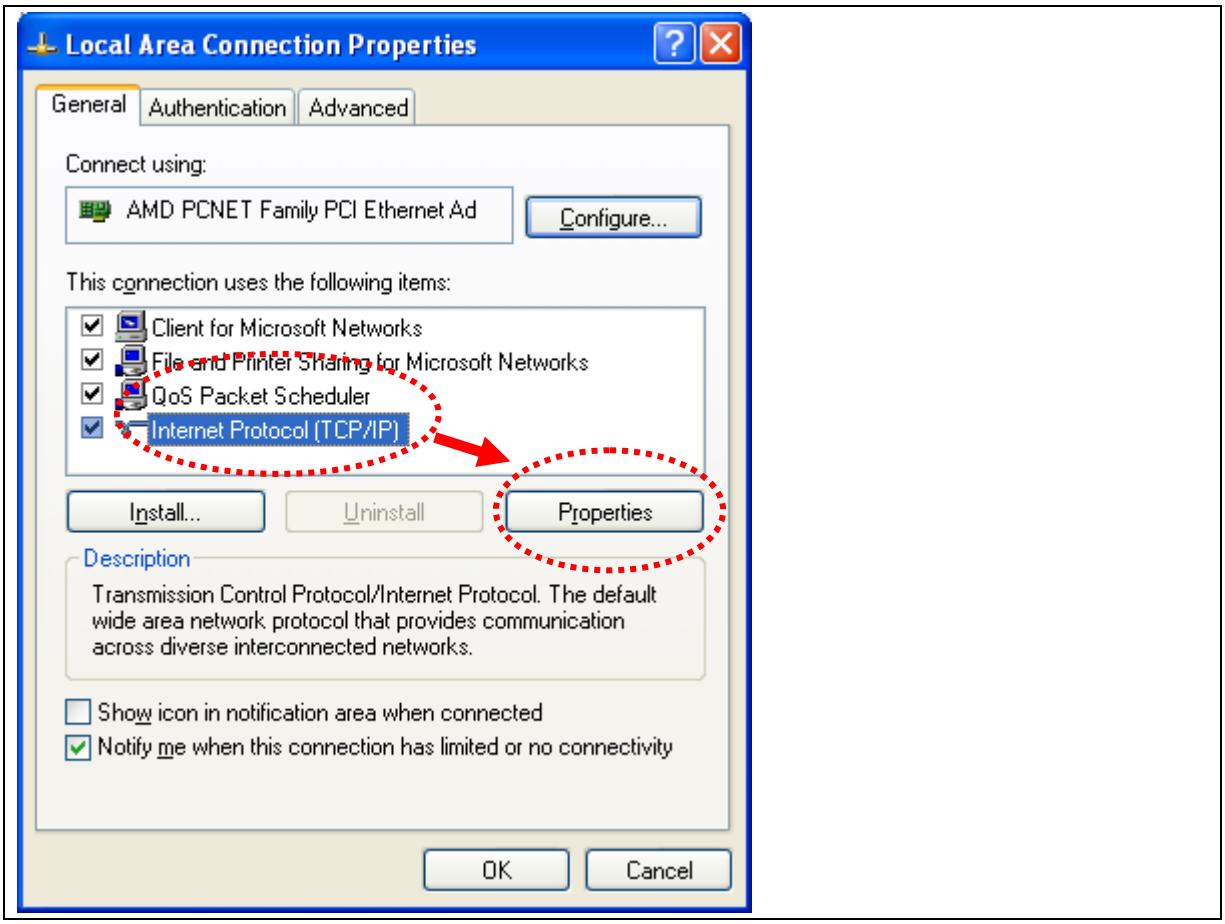


2. Select ‘Obtain an IP address automatically’ and ‘Obtain DNS server address automatically’, then click ‘OK’.

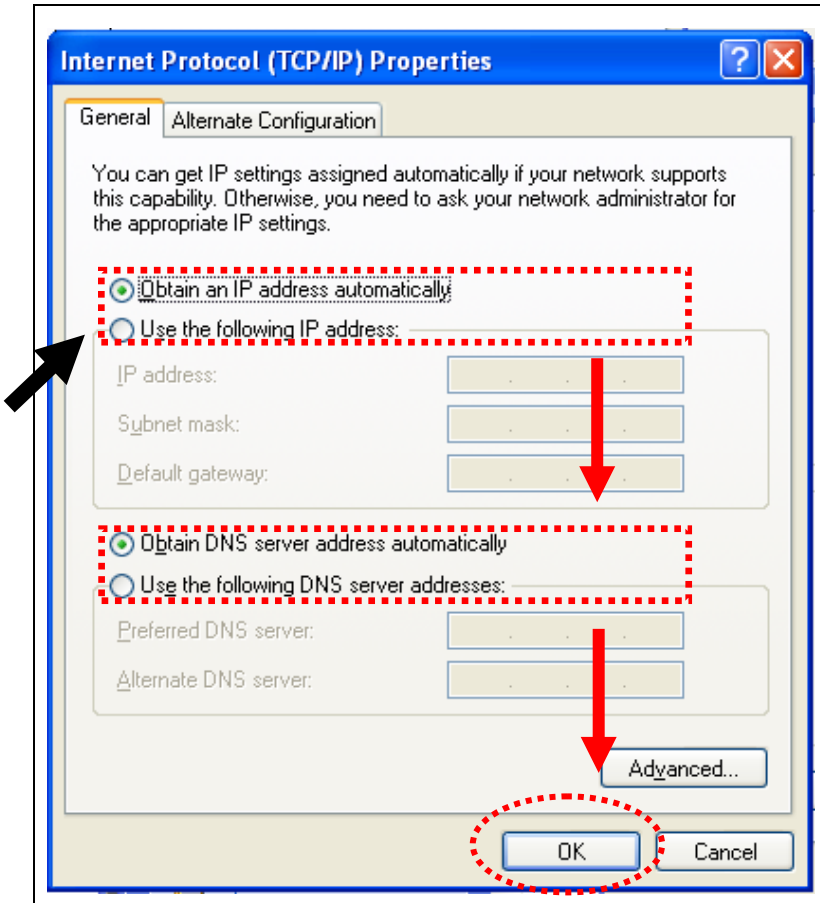

Internet Protocol (TCP/IP) Properties
General
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

2.2.3 Windows XP

1. Click ‘Start’ button (it should be located at lower-left corner of your computer), then click control panel. Double-click ***Network and Internet Connections*** icon, click ***Network Connections,*** then double-click ***Local Area Connection, Local Area Connection Status*** window will appear, and then click ‘Properties’.

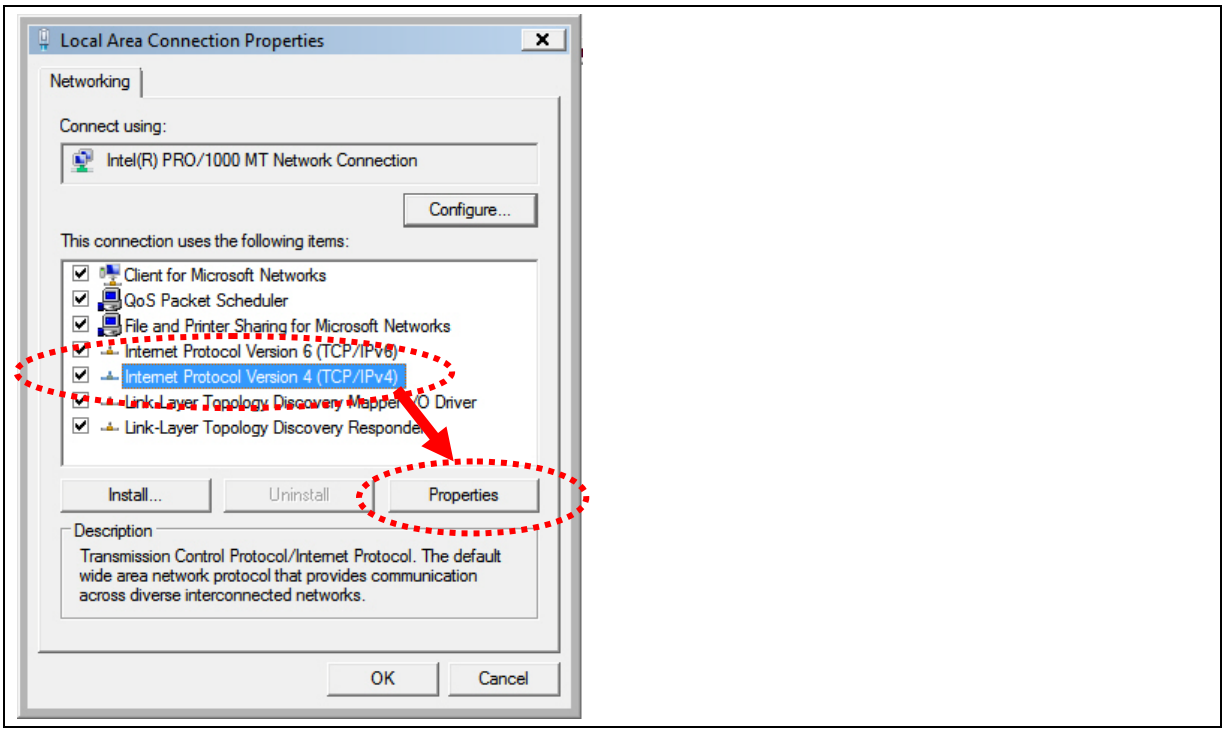


2. Select ‘Obtain an IP address automatically’ and ‘Obtain DNS server address automatically’, then click ‘OK’.

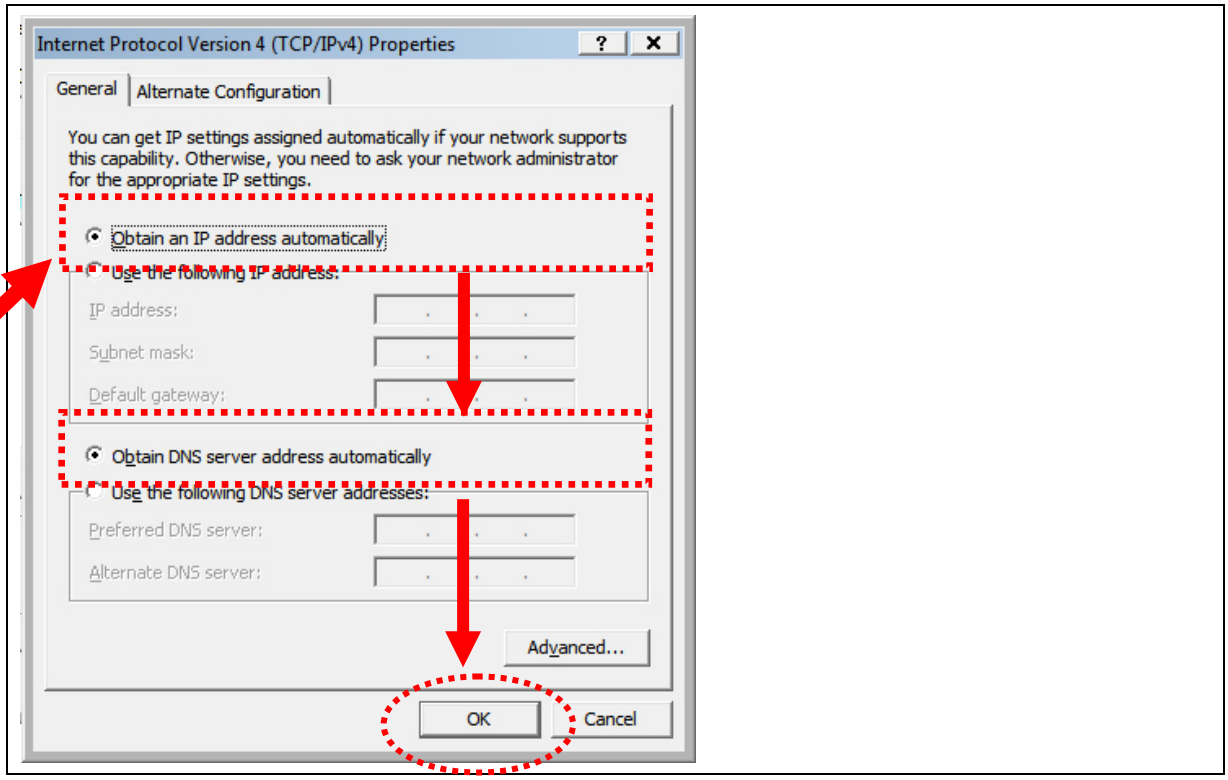

Internet Protocol (TCP/IP) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

2.2.4 Windows Vista

1. Click ‘Start’ button (it should be located at lower-left corner of your computer), then click control panel. Click ***View Network Status and Tasks***, and then click ***Manage Network Connections.*** Right-click ***Local Area Netwrok, then select ‘Properties’. Local Area Connection Properties*** window will appear, select ‘Internet Protocol Version 4 (TCP / IPv4), and then click ‘Properties’.

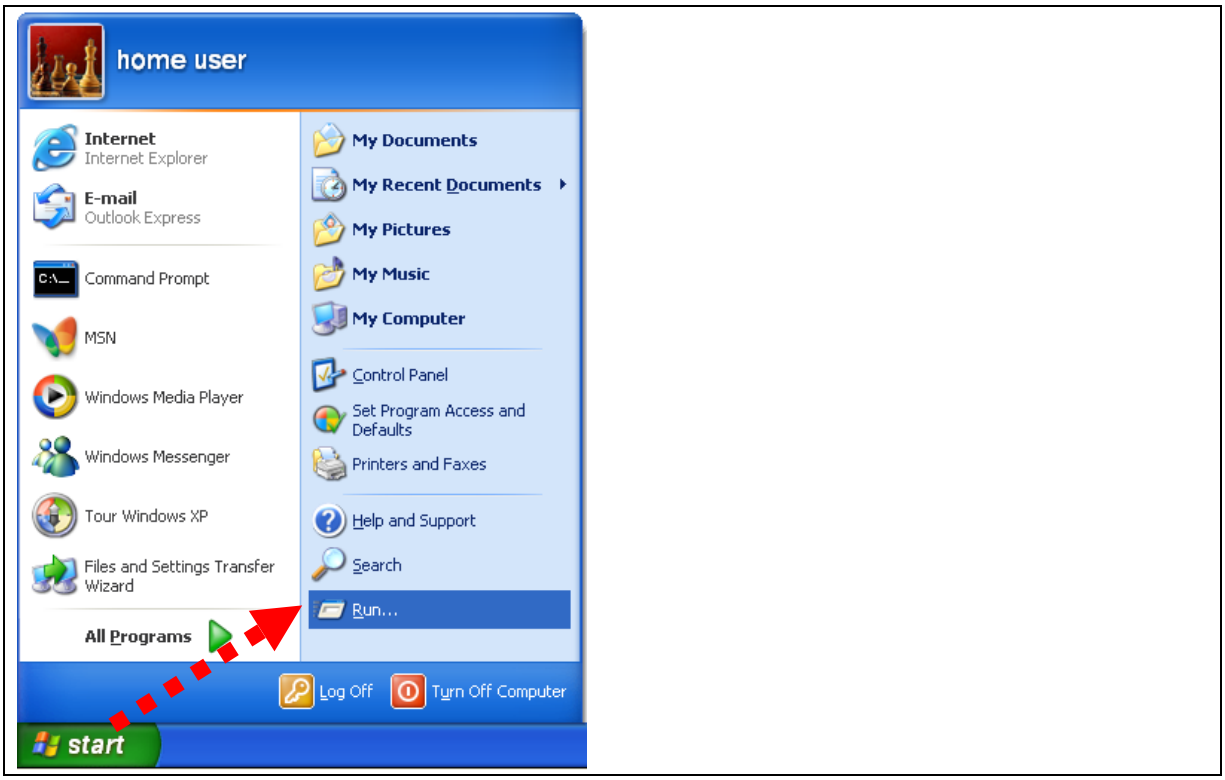


2. Select ‘Obtain an IP address automatically’ and ‘Obtain DNS server address automatically’, then click ‘OK’.

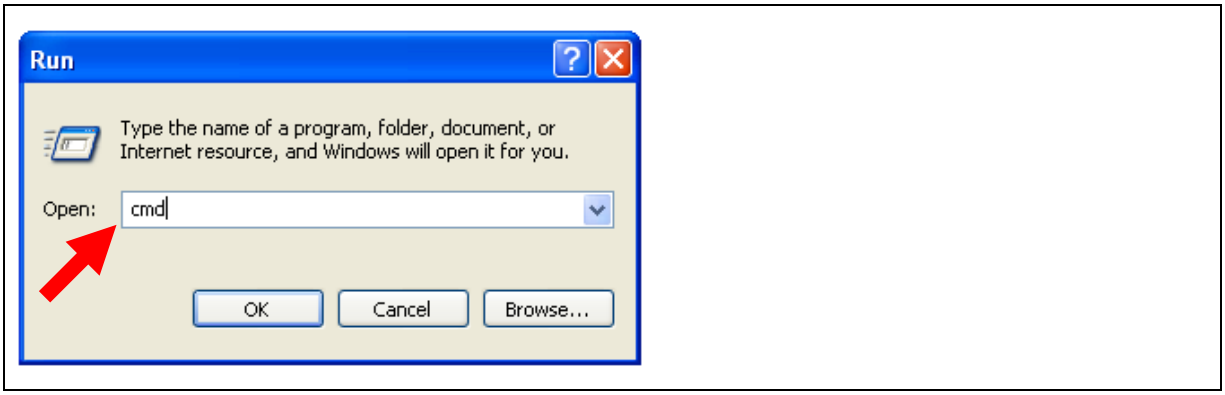

Internet Protocol Version 4 (TCP/IPv4) Properties
General
Alternate Configuration
You can get IP settings assigned automatically if your network supports this capability. Otherwise, you need to ask your network administrator for the appropriate IP settings.
Obtain an IP address automatically
Use the following IP address:
IP address:
Subnet mask:
Default gateway:
Obtain DNS server address automatically
Use the following DNS server addresses:
Preferred DNS server:
Alternate DNS server:
Advanced...
OK
Cancel

2.2.5 Router IP Address Lookup

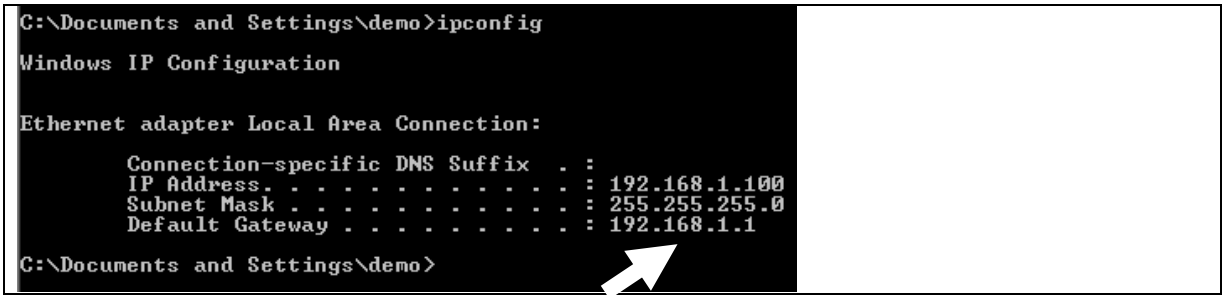
After the IP address setup was completed, please clicks 'start' → 'run' at the bottom-lower corner of your desktop:



Input 'cmd', and then click 'OK'



Input 'ipconfig', then press 'Enter' key. Please check the IP address followed by 'Default Gateway' (In this example, the gateway IP address of router is 192.168.1.1)

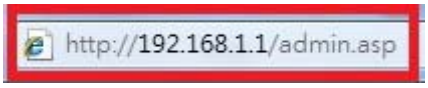

C:\Documents and Settings\demo>ipconfig
Windows IP Configuration
Ethernet adapter Local Area Connection:
Connection-specific DNS Suffix . :
IP Address. . . . . : 192.168.1.100
Subnet Mask . . . . . : 255.255.255.0
Default Gateway . . . . . : 192.168.1.1
C:\Documents and Settings\demo>

NOTE: If the IP address of Gateway is not displayed, or the address followed by 'IP Address' begins with '169.x.x.x', please recheck network connection between your computer and router, and / or go to the beginning of this chapter, to recheck every step of network setup procedure.

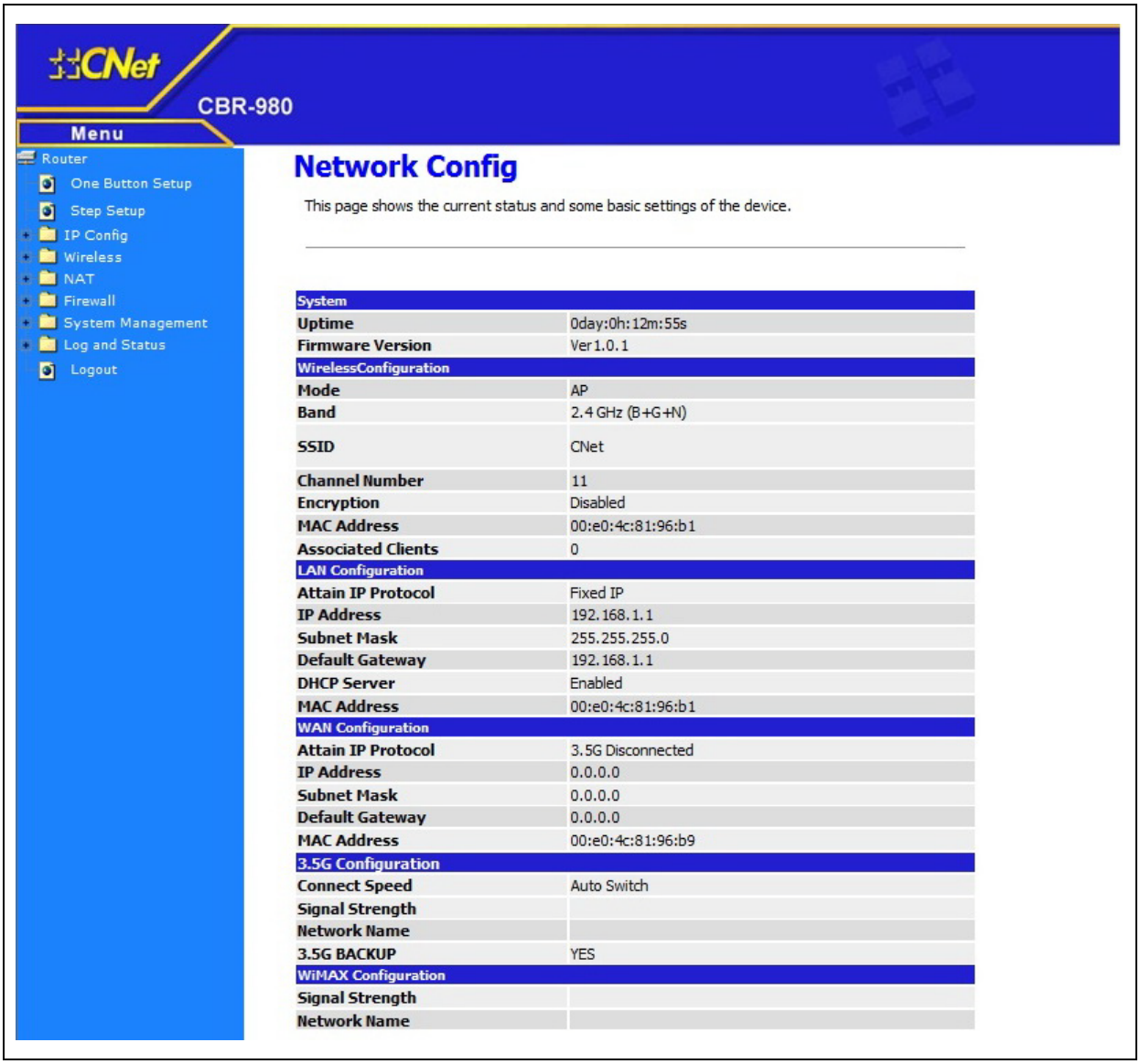
2.2.6 Connect the Wireless Router's management Interface by Web Browser

After your computer obtained an IP address from wireless router, please start your web browser, and input the IP address of the wireless router in address bar, and the following message should be shown. Please click "Administrator" to login the CBR-980.

Notes: The default IP of the wireless router is 192.168.1.1



Please input user name and password in the field respectively. Default user name is '**admin**', and default password is '**admin**', then press '**Login**' button to login the web management interface of the wireless router.

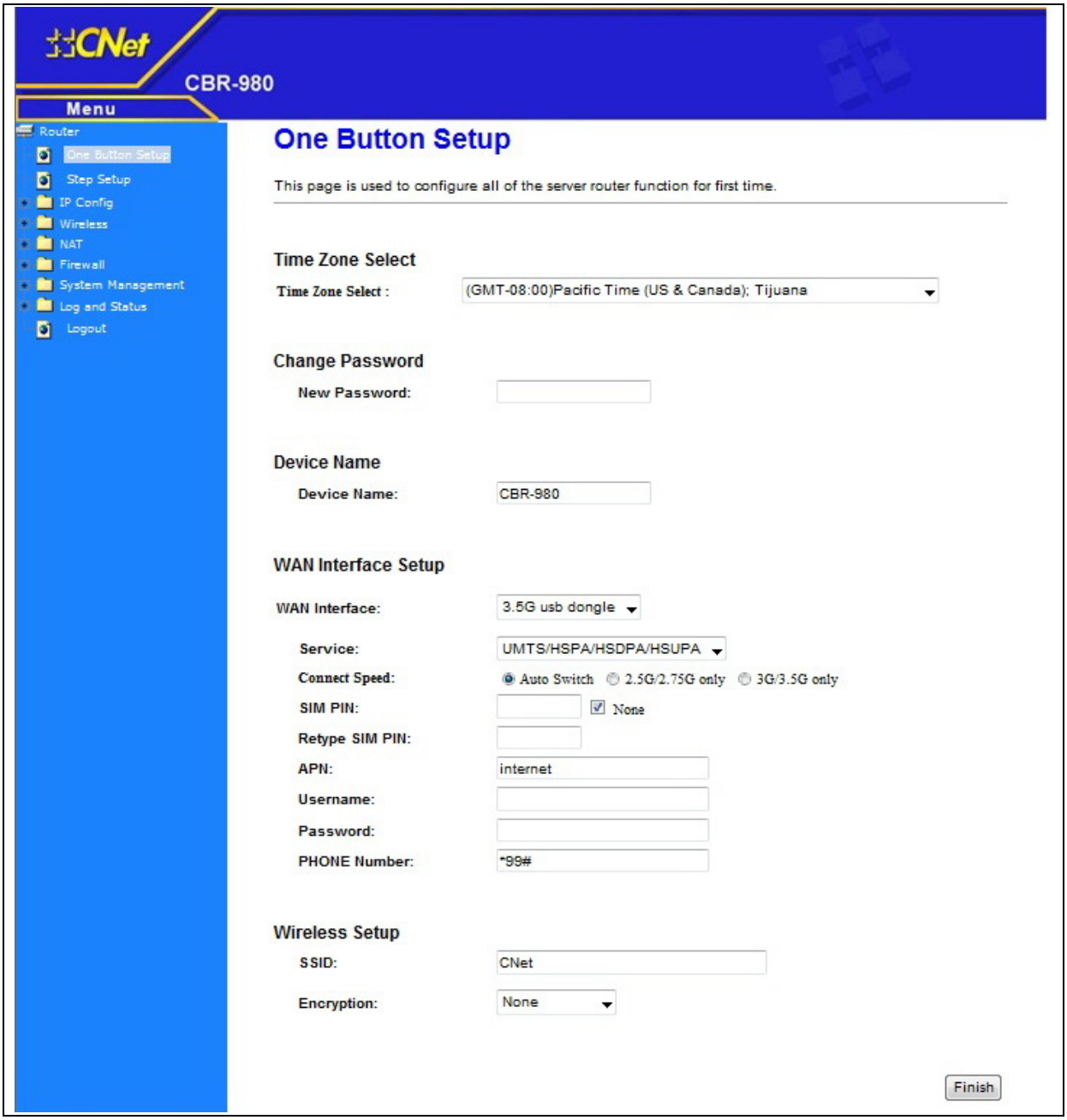


NOTE: If you can't see the web management interface, and you're being prompted to input user name and password again, it means you didn't input username and password correctly. Please retype user name and password again. If you're certain about the user name and password what you type are correct, please go to 'Troubleshooting' to perform a factory reset, to set the password back to the default value.

Chapter 3 One Button Setup Configuration

CBR-980 “One Button Setup” will help you to setup the basic setting of the wireless router with simplify procedure. You do not need to learn much complicated network proper name but you still can setup the wireless router by yourself.

Please click “**One Button Setup”** function, and then click the “finish” to complete the setting. The router will reboot automatically.



Item	Description
Time Zone Select	Press button to choose a time zone of the location you live from the drop-down list.
Change Password	Input new password here
Device Name	Input new device name here
WAN Interface Setup	Choose the broadband interface you are using. The wireless router supports Ethernet Port / 3.5G USB dongle / WiMAX / Wireless 4 different types interfaces
Wireless Setup	Configure Wireless SSID and Security.
Finish	Click finish button to complete the setting

Chapter 4 Quick Setup Configuration

There are two way to connect to CBR-980 setup page.

A. Use Internet browser to connect to CBR-980

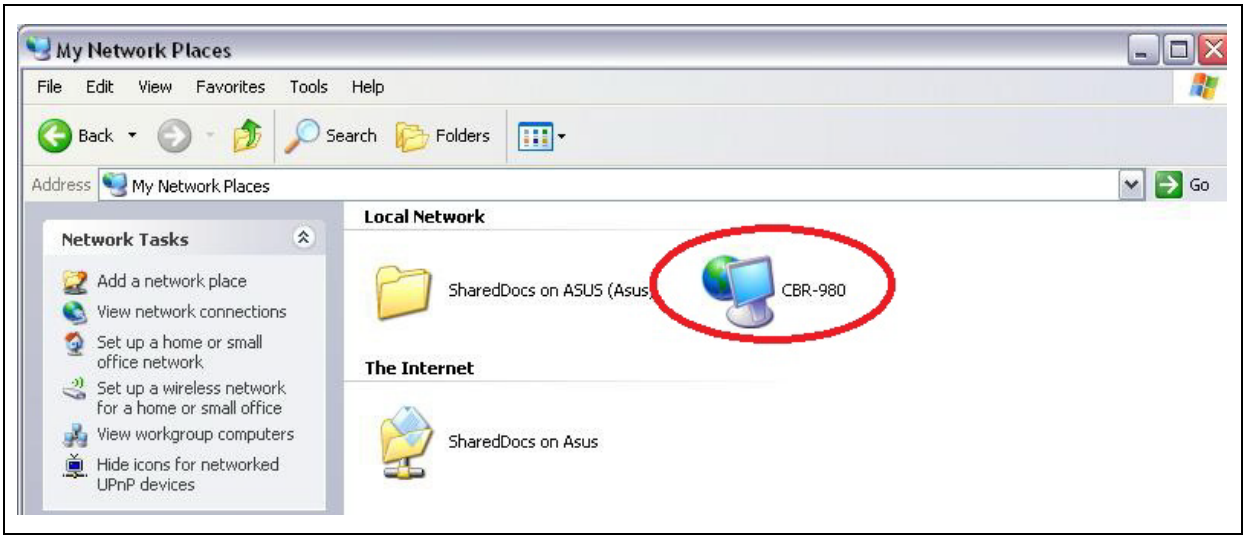
1. Please open your Internet browser, for example like IE or Firefox, and input the CBR-980 IP address, http://192.168.1.1

2. Login page will shown as below, and enter username / password. The user name is "**admin**", the password is "**admin**", then click "**Login**" to enter CBR-980 main page.

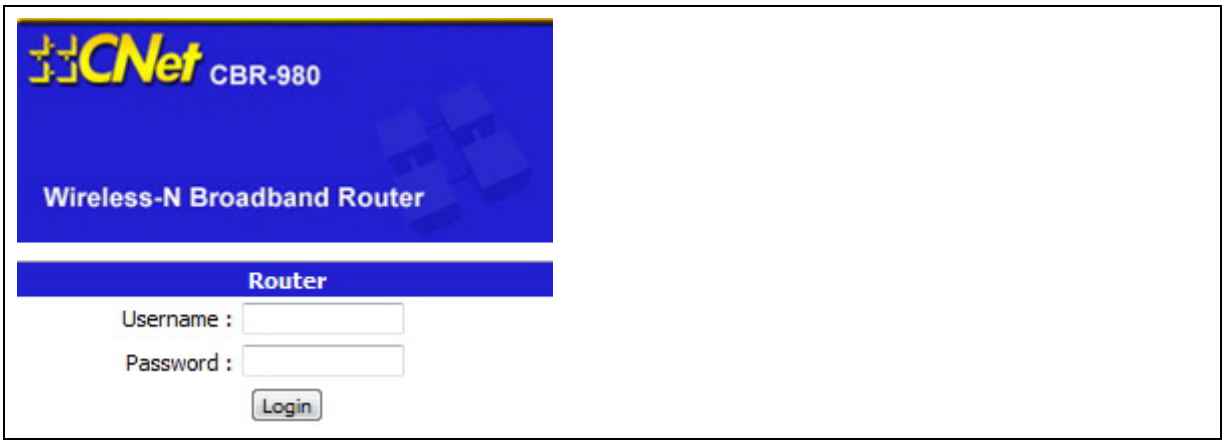
B. Use UPnP to connect to CBR-980

1. UPnP is enabled in CBR-980 default setting. You can find the UPnP device icon from the right down corner when your computer is in the same networking group with CBR-980.

You also can find the CBR-980 icon in the "**My Network Places**"



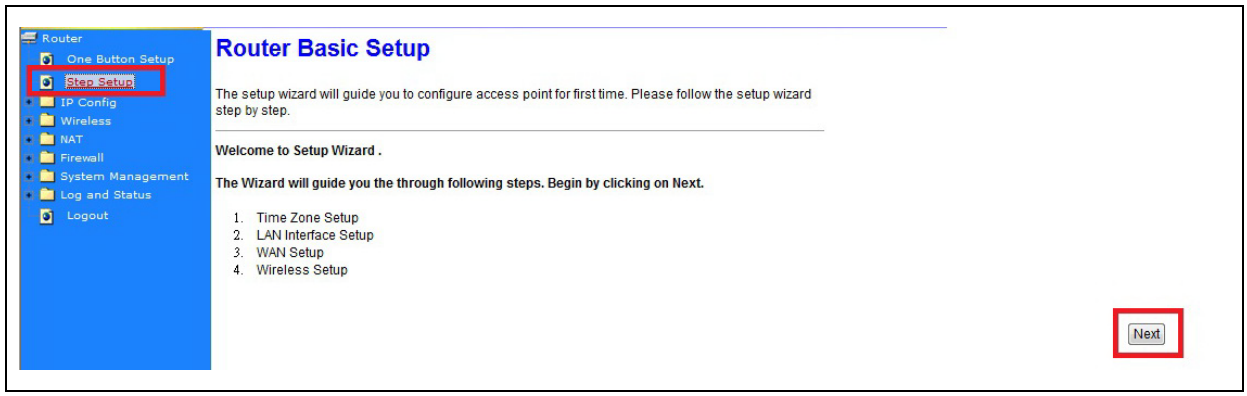
2. Click "**Internet Gateway Device**" to enter the login page



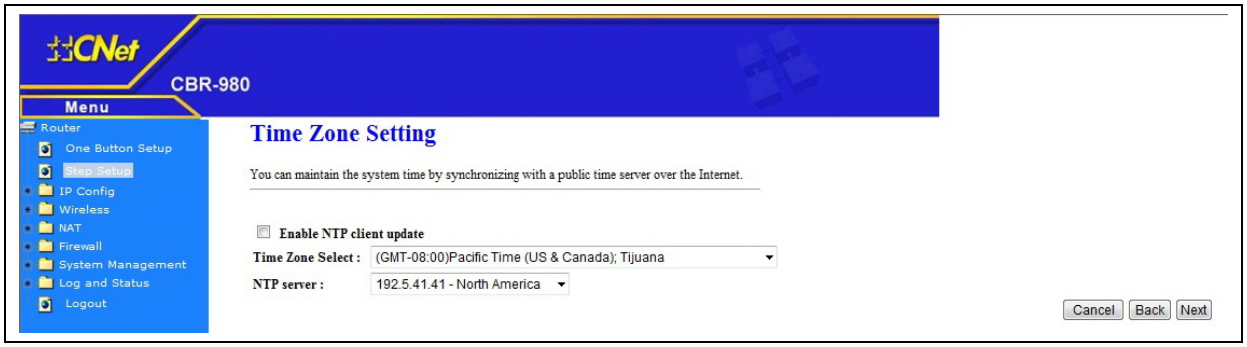
4.1 Step Setup

NOTE: Please click the "Finish" button to save the entire configuration and complete the step setting

Click on Step Setup in the left screen of the main menu, and click **"Step Setup",** then click **"Next"** to start configure your CBR-980.



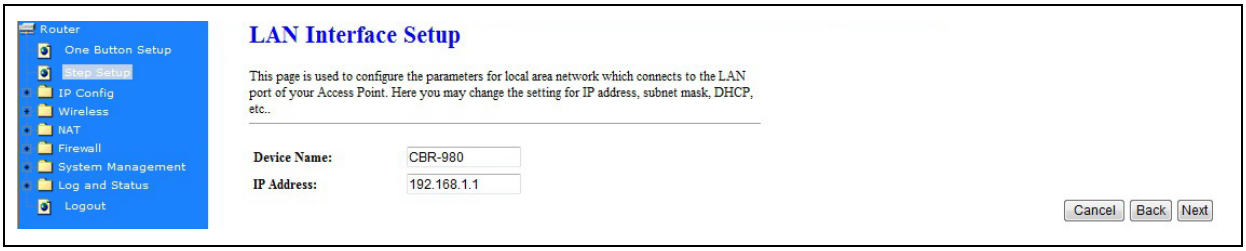
4.1.1 Time Zone Setup



Item	Description
Enable NTP Client update	Device will auto synchronize with NTP server when enabled
Time Zone Select	Press button to choose a time zone of the location you live from the drop-down list.
NTP Server	Press button to choose a NTP Server which you want to connect to.

*After you finish all of the setting, please click **"Next"** button to enter next step.*

4.1.2 LAN Interface Setup



Item	Description
Device Name	Fill in the name for the wireless router
IP Address	The wireless router IP address

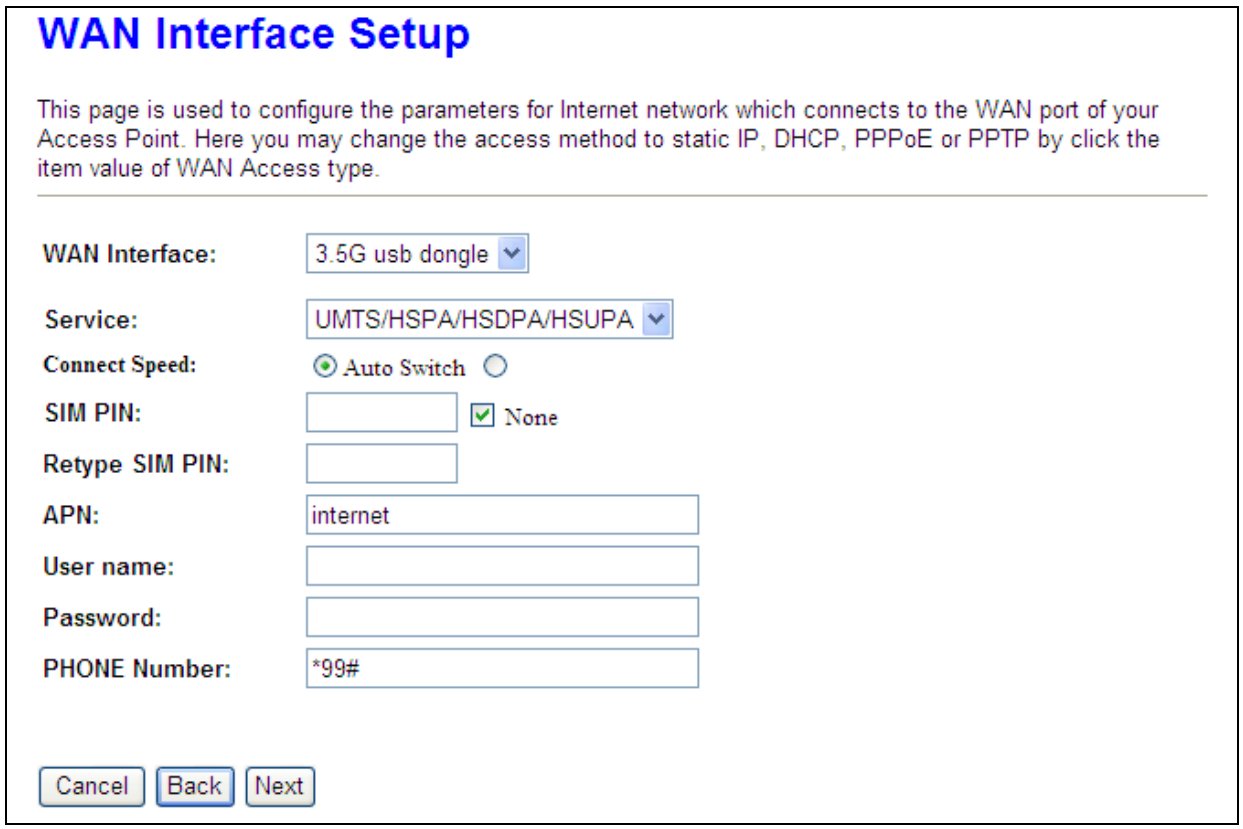
*After you finish all of the setting, please click **"Next"** button to enter next step.*

4.1.3 WAN Interface Setup

The WAN settings can be referred to as the Public setting. All IP information in the WAN settings is public IP addresses which are accessible on the Internet. 11n Broadband Router supports 4 interfaces and 4 access types to WAN. Select one of the WAN connection modes required by your ISP in the following WAN Setup Configuration page, the WAN setup pages will vary depending on what kind of WAN Type you select.

4.1.3.1 WAN Interface – 3.5G (HSDPA/UMTS)

If you are using HSDPA/UMTS (3.5G connection) as the WAN Type, please select **3.5G USB Dongle** and fill in the required information as follows to directly access Internet via connected 3.5G adapter. At this moment, **Backup of Connection** is not available. When 3.5G signal cannot be reached, the system starts to search downward for 3/2.75/2.5G signals until none existed.



4.1.3.2 WAN Interface – Ethernet Port

If you are using an Ethernet cable to connect the Internet, please select **Ethernet port**.

WAN Interface Setup

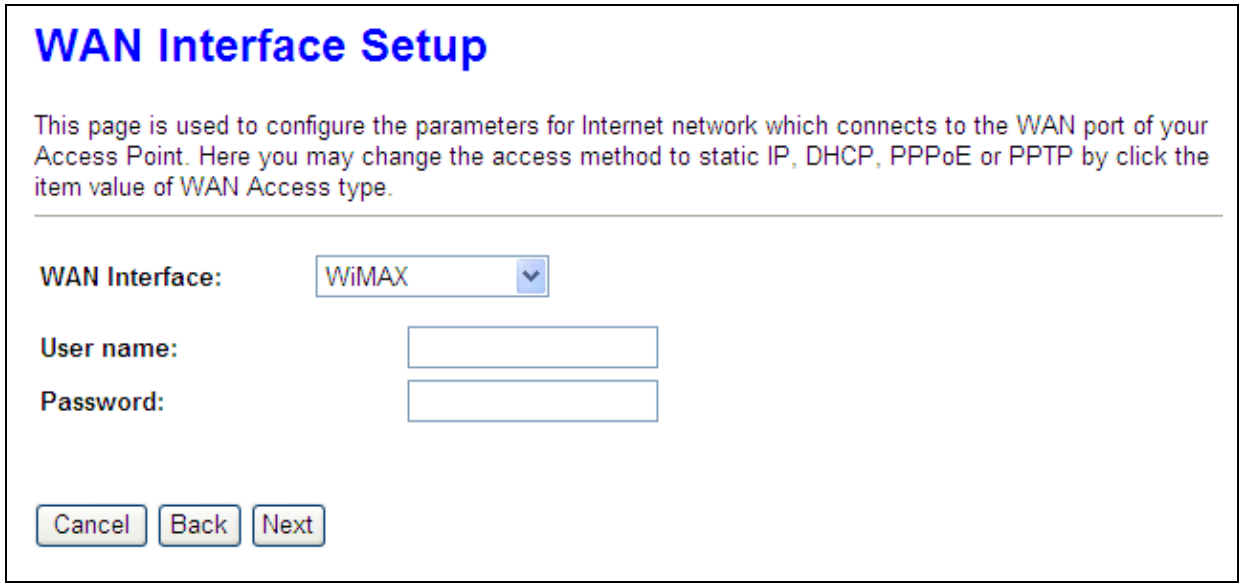
This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE or PPTP by click the item value of WAN Access type.

WAN Interface:	Ethernet Port
WAN Access Type:	DHCP Client
3.5G Backup:	☑ Backup of connection, check connection in every 3 minutes.
Service:	UMTS/HSPA/HSDPA/HSUPA
Connect Speed:	◉ Auto Switch ○ 2.5G/2.75G only ○ 3G/3.5G only
SIM PIN:	☑ None
Retype SIM PIN:	
APN:	internet
User name:	
Password:	
PHONE Number:	*99#

Cancel Back Next

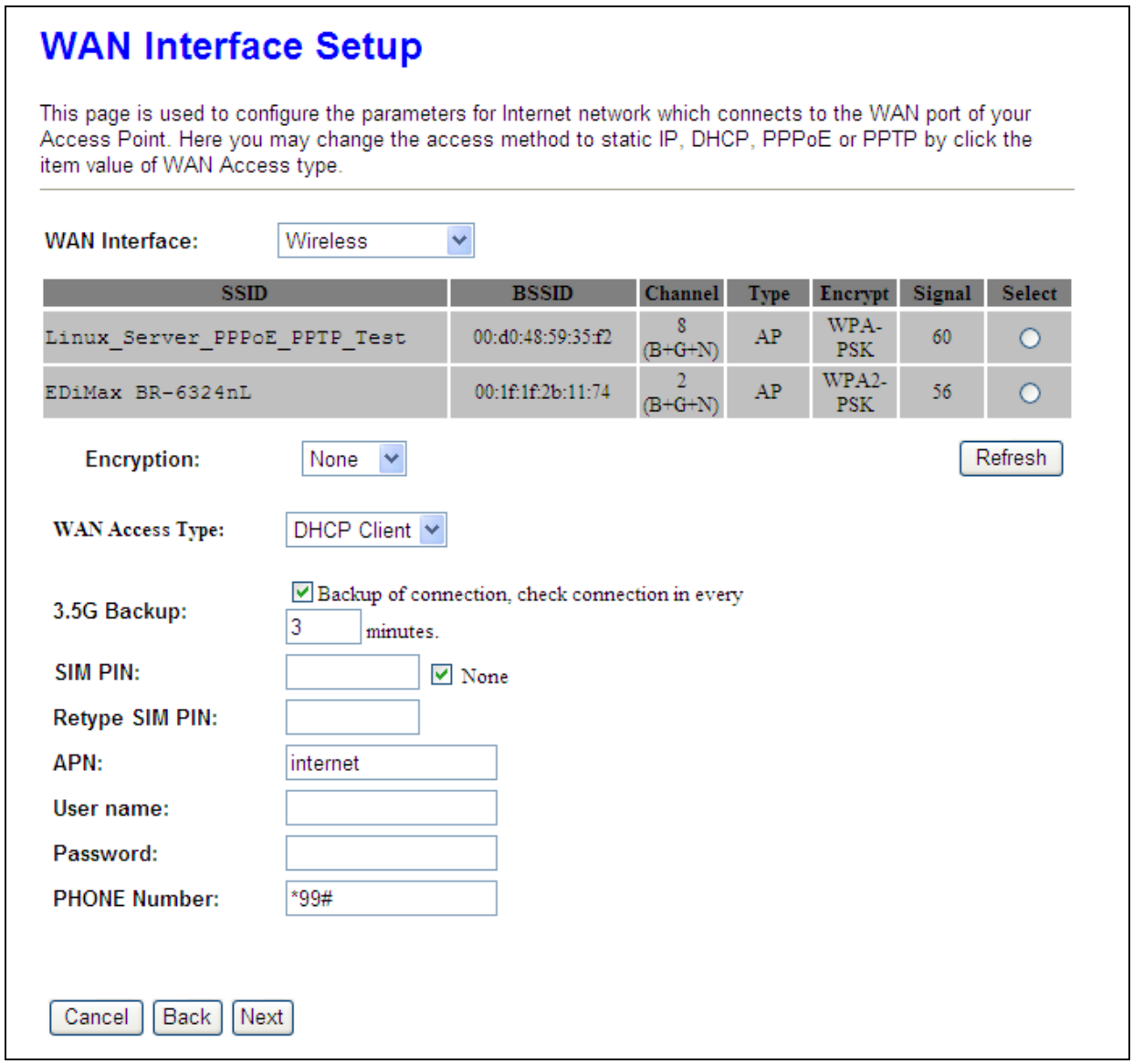
4.1.3.3 WAN Access Type – WiMAX

If you are using WiMAX as the WAN Type, please select **WiMAX** and fill in the required information as follows to directly access Internet via connected WiMAX adapter.


WAN Interface Setup
This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE or PPTP by click the item value of WAN Access type.
WAN Interface:
WiMAX
User name:
Password:
Cancel
Back
Next

4.1.3.4 WAN Access Type – Wireless

If you are connecting the internet via wireless, please select **Wireless** and its associated settings will show up underneath at the same time.


WAN Interface Setup
This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE or PPTP by click the item value of WAN Access type.
WAN Interface: Wireless
SSID BSSID Channel Type Encrypt Signal Select
Linux_Server_PPPoE_PPTP_Test 00:d0:48:59:35:f2 8 (B+G+N) AP WPA-PSK 60
EDiMax BR-6324nL 00:1f:1f:2b:11:74 2 (B+G+N) AP WPA2-PSK 56
Encryption: None
Refresh
WAN Access Type: DHCP Client
3.5G Backup: Backup of connection, check connection in every 3 minutes.
SIM PIN: None
Retype SIM PIN:
APN: internet
User name:
Password:
PHONE Number: *99#
Cancel Back Next

You can see a list of available Wireless networks. Select you preferred one to connect and the Encryption type form the drop-down list.

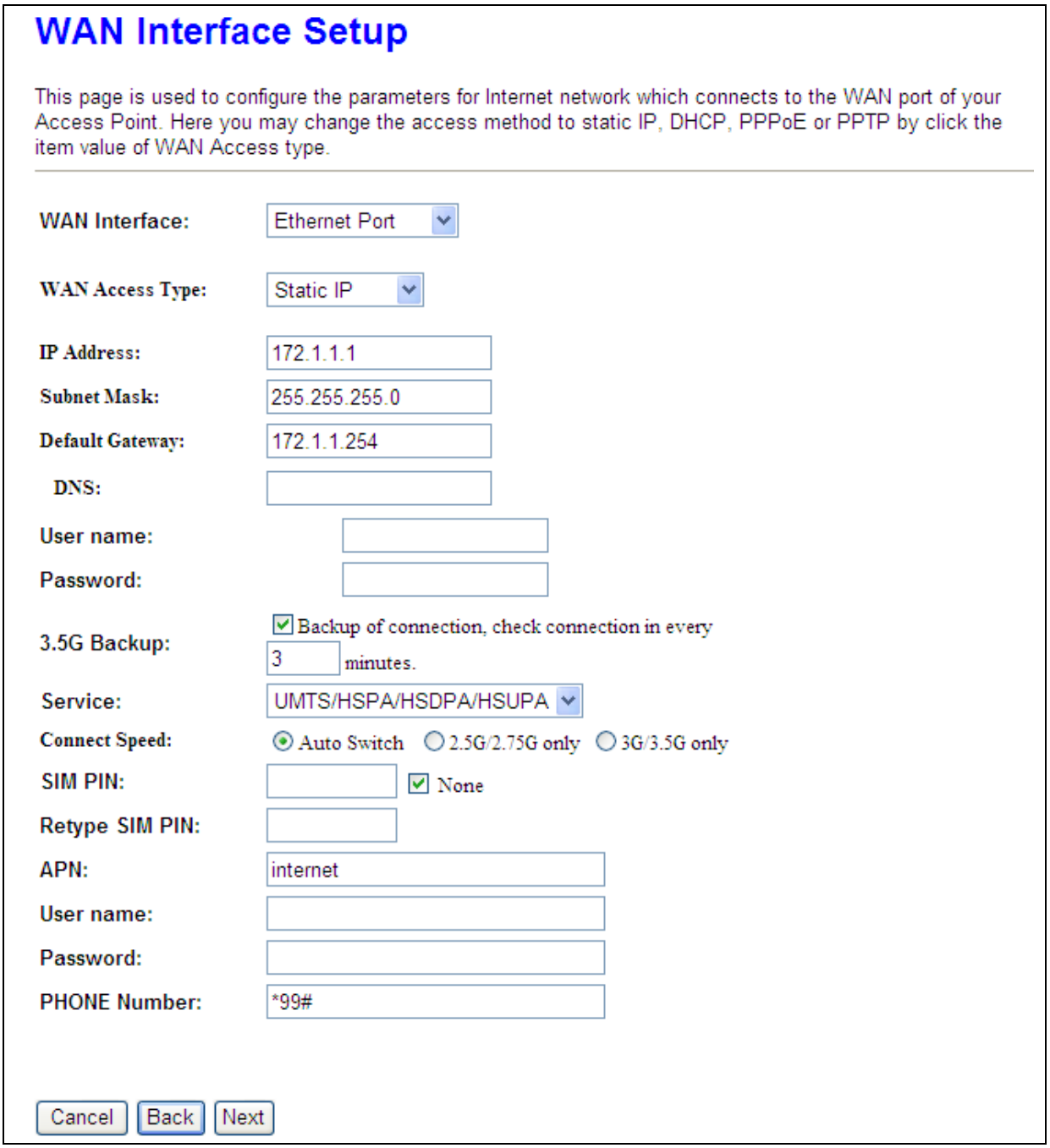
4.1.3.5 WAN Access Type – Static IP

Choose Static IP Address if all WAN IP information is provided to you by your ISP. You will need to enter the IP address, IP Netmask and IP gateway as provided. Each entered fields must be in the appropriate IP form, which are four IP octets separated by a dot (x.x.x.x). The Router will not accept the IP address if it is not in this format. Fill in the DNS information provided by your ISP; otherwise, **Domain Name** can't be used.

In particular, here provides 3G or 3.5G transmission rate when the 3.5G adapter is plugged, just check to apply for the backup. In other words, once Static IP connection is disconnected, the system

automatically connects Internet via 3.5G adapter. If 3.5G signal is not available, it starts to search downward for 3/2.75/2.5G signals until none existed. The default interval between the two connection detection is 3 minutes. The interval range is from 1 to 60 minutes.

The 3.5G feature is working as mutual backup for other 3 WAN Types, and the required information is listed as follows, such as user name, password and SIM PIN etc. That is, setting up the interval time to auto detect whether the Internet connection is lost or not. If yes, the system immediately switches to 3.5G Internet connection and will disconnect automatically when the original Static IP connection recovers.



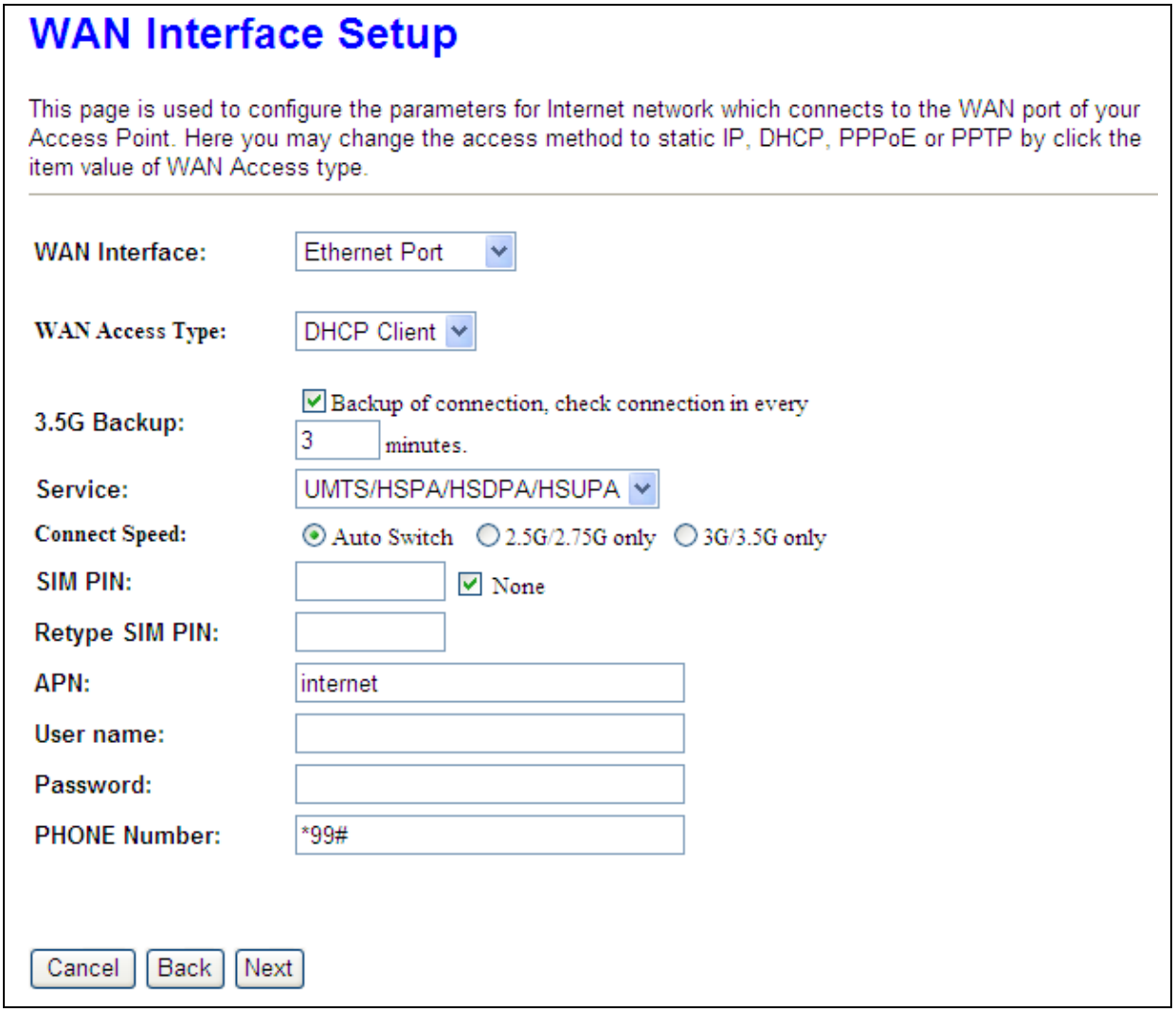
Click on **Next** button to go on next setting page.

4.1.3.6 WAN Access Type – Dynamic IP

Choose Dynamic IP to obtain IP address information automatically from your ISP. Select this option if your ISP does not give you any IP numbers to use. This option is commonly used for Cable modem services.

Apply 3G or 3.5G transmission rate for the backup. Once Dynamic IP connection is disconnected, the system automatically connects Internet via 3.5G adapter. If 3.5G signal is not available, it starts to search downward for 3/2.75/2.5G signals until none existed.

Setting up the interval time to auto detect whether the Internet connection is lost or not. If yes, the system immediately switches to 3.5G Internet connection and will disconnect automatically the original Dynamic IP recovers.



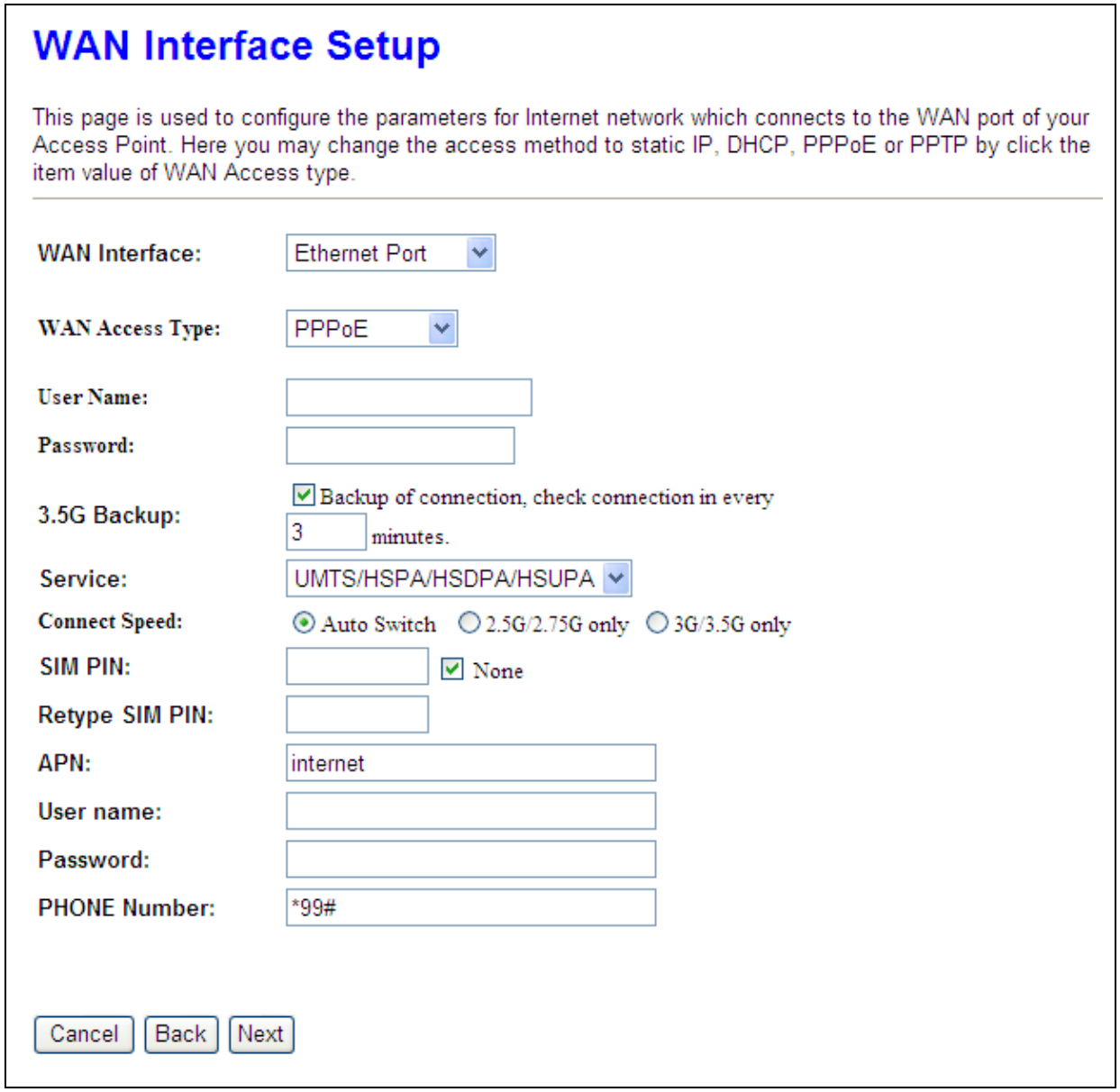
Click on **Next** button to go on next setting page.

4.1.3.7 WAN Access Type – PPPoE

This option is typically used for DSL services. Choose PPPoE (Point to Point Protocol over Ethernet) if your ISP uses PPPoE connection. Your ISP will provide you with a username and password.

Apply 3G or 3.5G transmission rate for the backup. In other words, once PPPoE connection is disconnected, the system automatically connects Internet via 3.5G adapter. If 3.5G signal is not available, it starts to search downward for 3/2.75/2.5G signals until none existed.

Setting up the interval time to auto detect whether the Internet connection is lost or not. If yes, the system immediately switches to 3.5G Internet connection and will disconnect automatically the original PPPoE connection recovers.



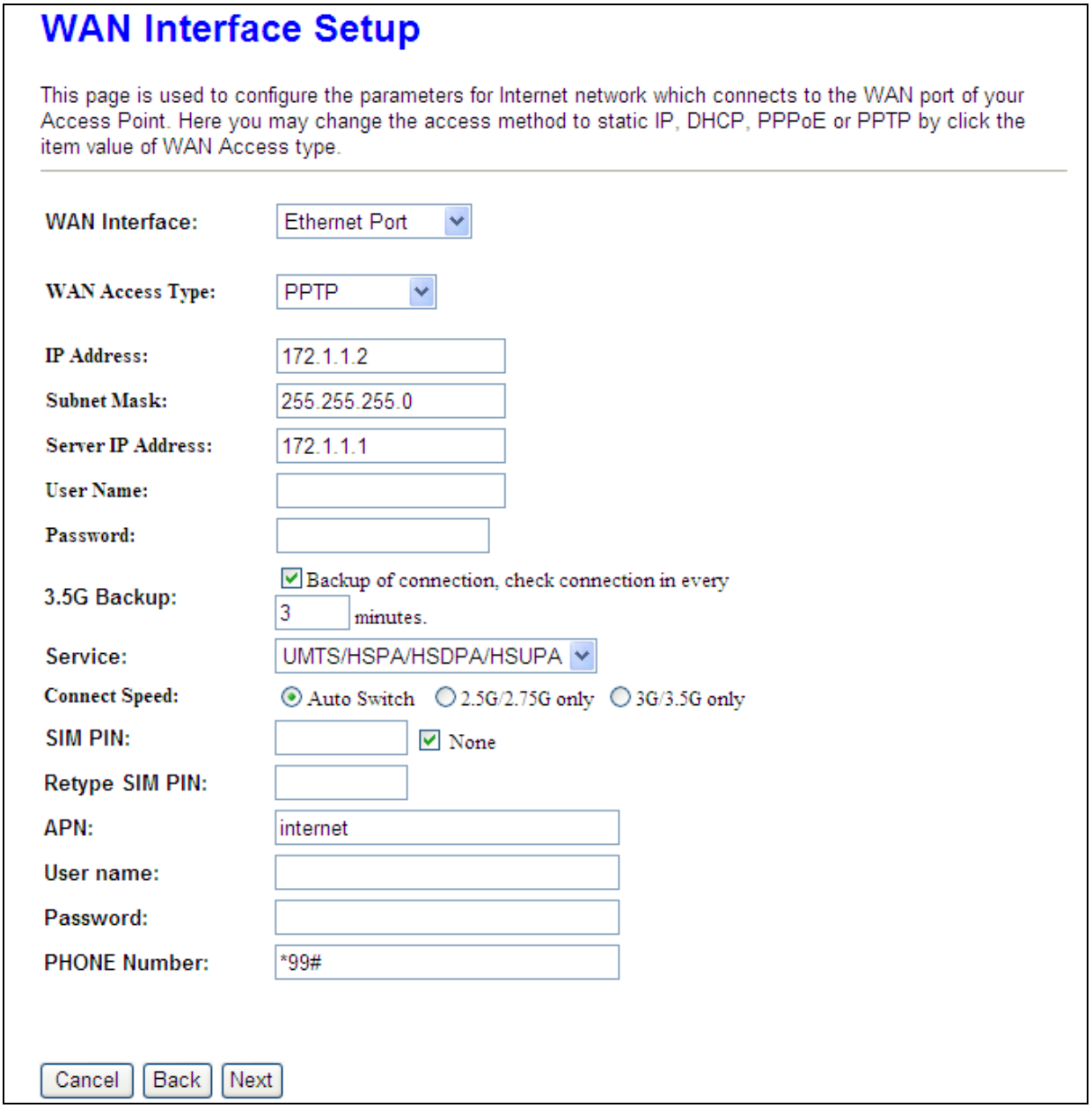
Click on **Next** button to go on next setting page.

4.1.3.8 WAN Access Type -- PPTP

This option is typically used for DSL services. Some DSL service providers supply a special DSL modem. This kind of modem only supports the PPTP tunnel to access the Internet, you should create a PPTP tunnel that carries a PPP session and terminates on the DSL model. Once the tunnel has been established, this kind of DSL modem will forward the PPP session to the ISP. As long as the PPP session is connected, all the local users will be able to share this PPP session to access to the Internet.

Apply 3G or 3.5G transmission rate for the backup. Once Dynamic IP connection is disconnected, the system automatically connects Internet via 3.5G adapter. If 3.5G signal is not available, it starts to search downward for 3/2.75/2.5G signals until none existed.

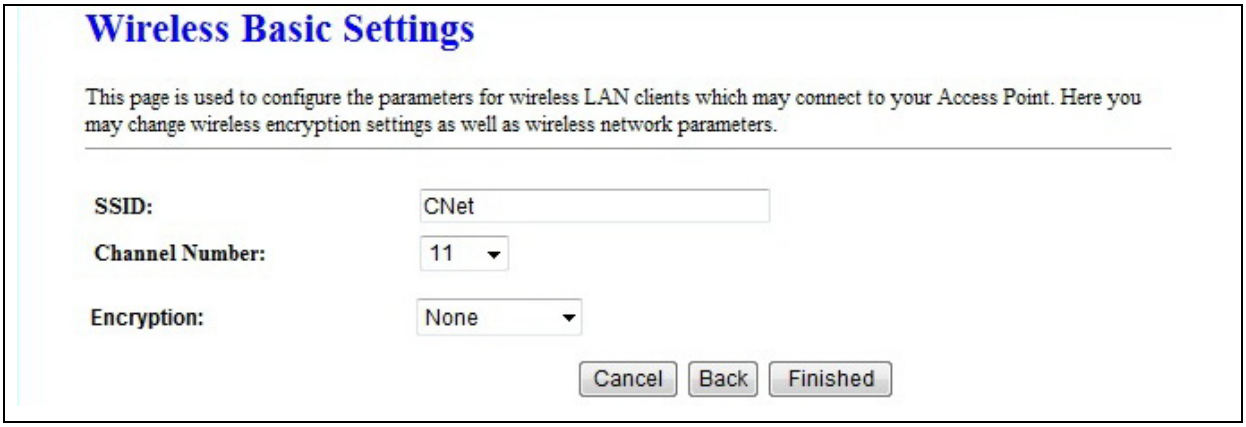
Setting up the interval time to auto detect whether the Internet connection is lost or not. If yes, the system immediately switches to 3.5G Internet connection and will disconnect automatically the original PPTP connection recovers.



Click on **Next** button to go on next setting page.

4.1.4 Wireless Setup

First step is to name your SSID, and the default value is Download Server Router. Please follow the illustrations below to proceed.

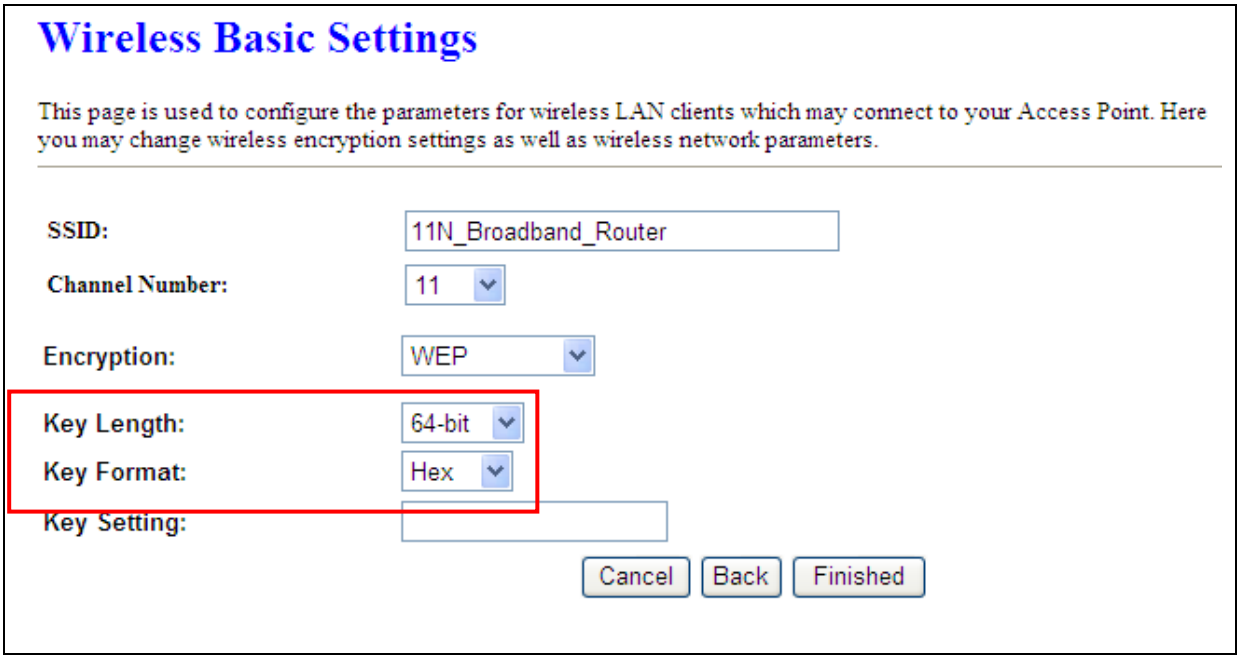

Wireless Basic Settings
This page is used to configure the parameters for wireless LAN clients which may connect to your Access Point. Here you may change wireless encryption settings as well as wireless network parameters.
SSID:
CNet
Channel Number:
11
Encryption:
None
Cancel
Back
Finished

4.1.4.1 Wireless Security Setup

The security function is provided to prevent the connection requests from unauthorized wireless clients. As the **Encryption Type**, select WEP or WPA can protect your data from eavesdroppers, if you do not need the encryption, select “None” to skip the following setting.

a. Encrypt Type -- WEP

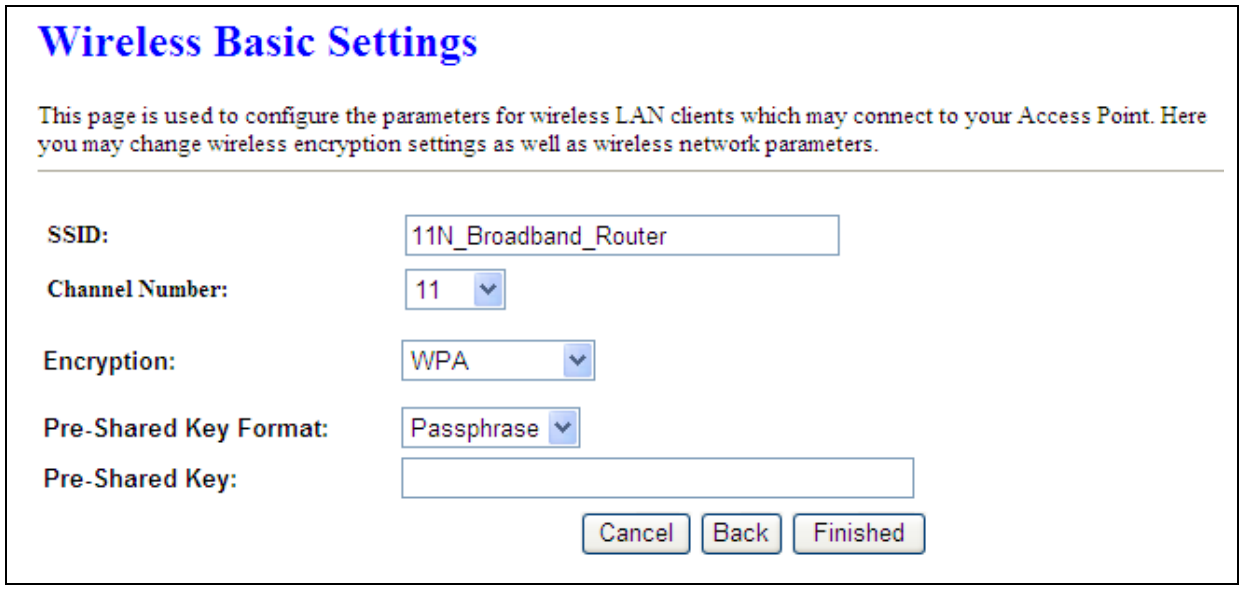
11n Broadband Router supports both 64-bit and 128-bit encryption using the Wired Equivalent Privacy (WEP) algorithm. Select the type of encryption you want to use (64 or 128 bit) and configure one to four WEP Keys. The “1280bit” method is more secure than the “64-bit”.



Item	Description
Key Length	There are two types of WEP key length: 64-bit and 128-bit. Using '128-bit' is more safety than '64-bit', but data transfer performance is more lower than '64-bit'.
Key Format	There are two types of key format: ASCII and Hex. When you select a key format, the number of characters of key will be displayed. For example, if you select '64-bit' as key length, and 'Hex' as key format, you'll see the message at the right of 'Key Format' is 'Hex (10 characters), which means the length of WEP key is 10 characters.

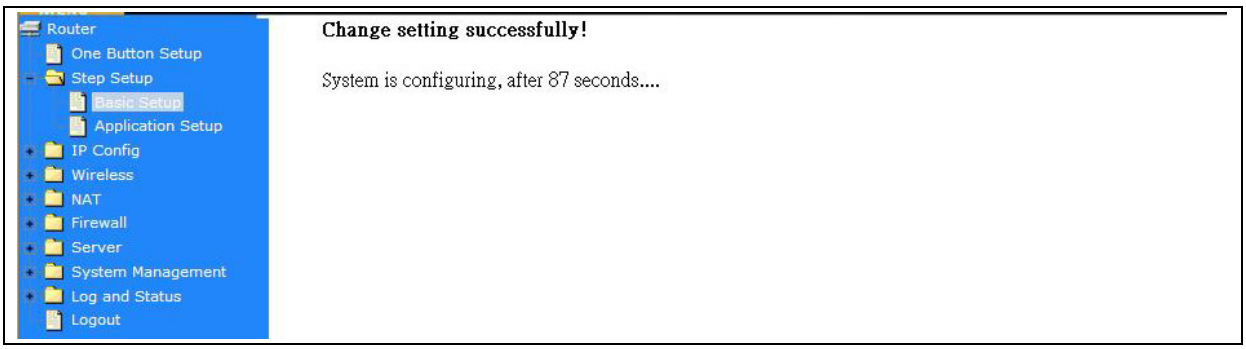
b. Encrypt Type – WPA, WPA2 & WPA2 Mix

The WPA and WPA2 encrypt each frame transmitted from the radio using the pre-shared key (PSK) which entered from this panel or a key got dynamically through 802.1x.



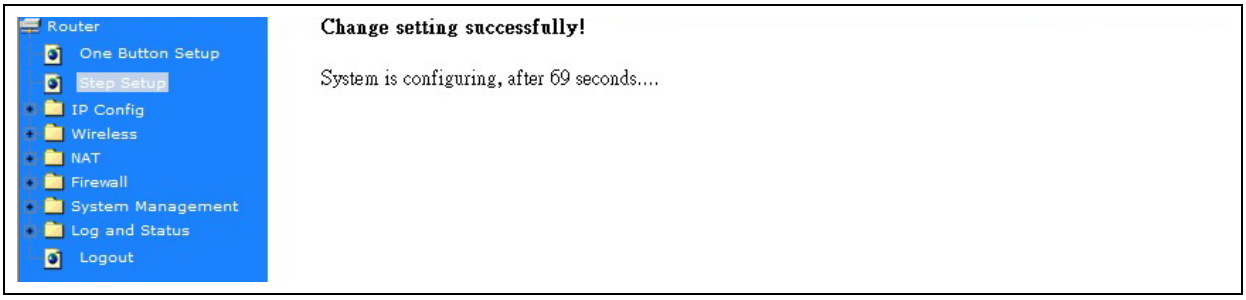
Item	Description
WPA (TKIP) and WPA2 (TKIP)	Allow the access from WPA clients simultaneously and the encryption keys are given from PSK respectively.
Pre-Shared Key Format:	The keys can be entered in ASCII, 8~63 ASCII characters, for example, "0123456789ABCD…." or Hex, 64 bytes hexadecimal digits (0~9, a~f, and A~F). Select the item from drop-down list you wish to use and enter your Pre-Shared Key.

After checking each above and choose the suitable item by demand, click **Finished** to proceed.



4.2 Basic Step Complete

The Basic Setup has been completed successfully when you see this screen.



The system will be rebooted automatically and go to the product's diagram homepage. You may connect to Internet via wired or wireless at this moment according to above settings.

Chapter 5 Advanced Configuration

This chapter describes how to setup the access the router through the web browser. Please be noted that in order to access the router's admin page, a computer must be connected to one of the LAN ports on the router. The WLAN Broadband Router is delivered with the following factory default parameters on the Ethernet LAN interfaces.

Default IP Address: 192.168.1.1

Default IP subnet mask: 255.255.255.0

WEB login User Name: admin

WEB login Password: admin

5.1 IP Configuration

In this section that user could configure the connection type of WAN port. Please check with your Internet Service Provider about the essential connection parameter.

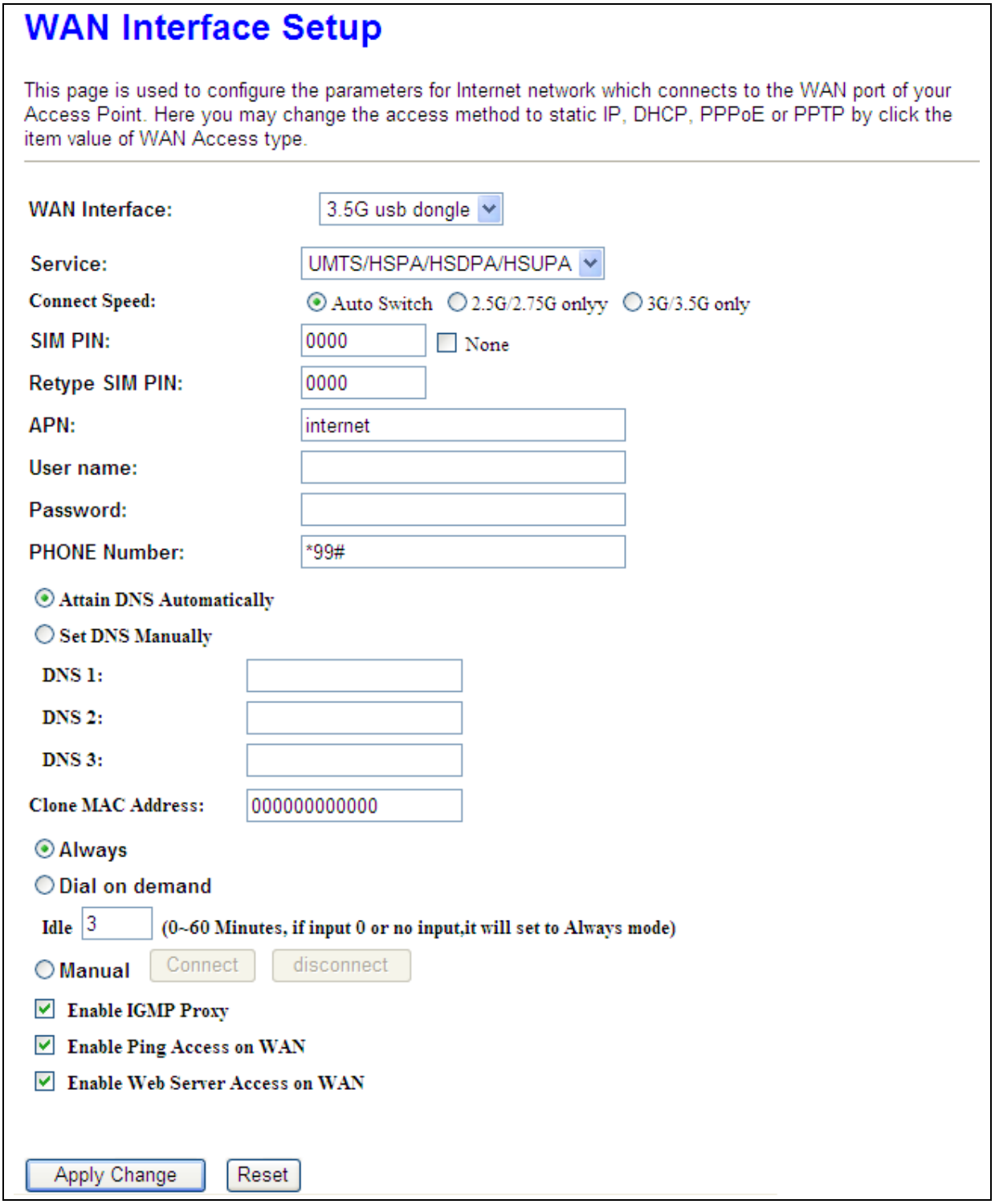
5.1.1 WAN Interface Setup

Select **WAN** under the **IP Config** menu. 11n Broadband Router supports 3 interfaces and 4 access types. Follow the instructions below for each to set up accordingly.

Choose your WAN Interface and WAN type, and click **Next,** its associated settings will show up.

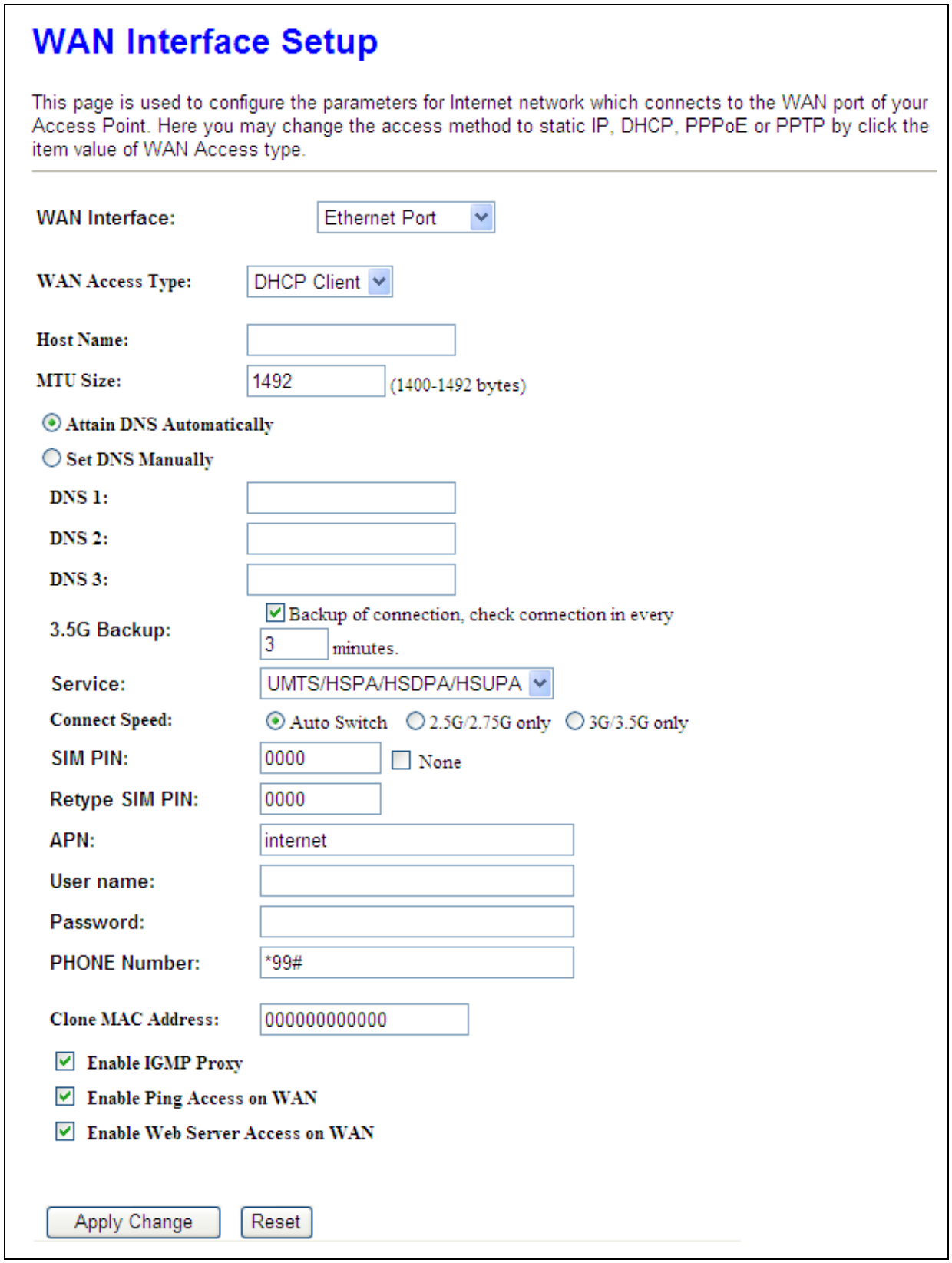
5.1.1.1 WAN Interface – 3.5G (HSDPA/UMTS)

If you are using HSDPA/UMTS (3.5G connection) as the WAN Type, please select **3.5G USB Dongle.** At this moment, **Backup of Connection** is not available. When 3.5G signal cannot be reached, the system starts to search downward for 3/2.75/2.5G signals until none existed.



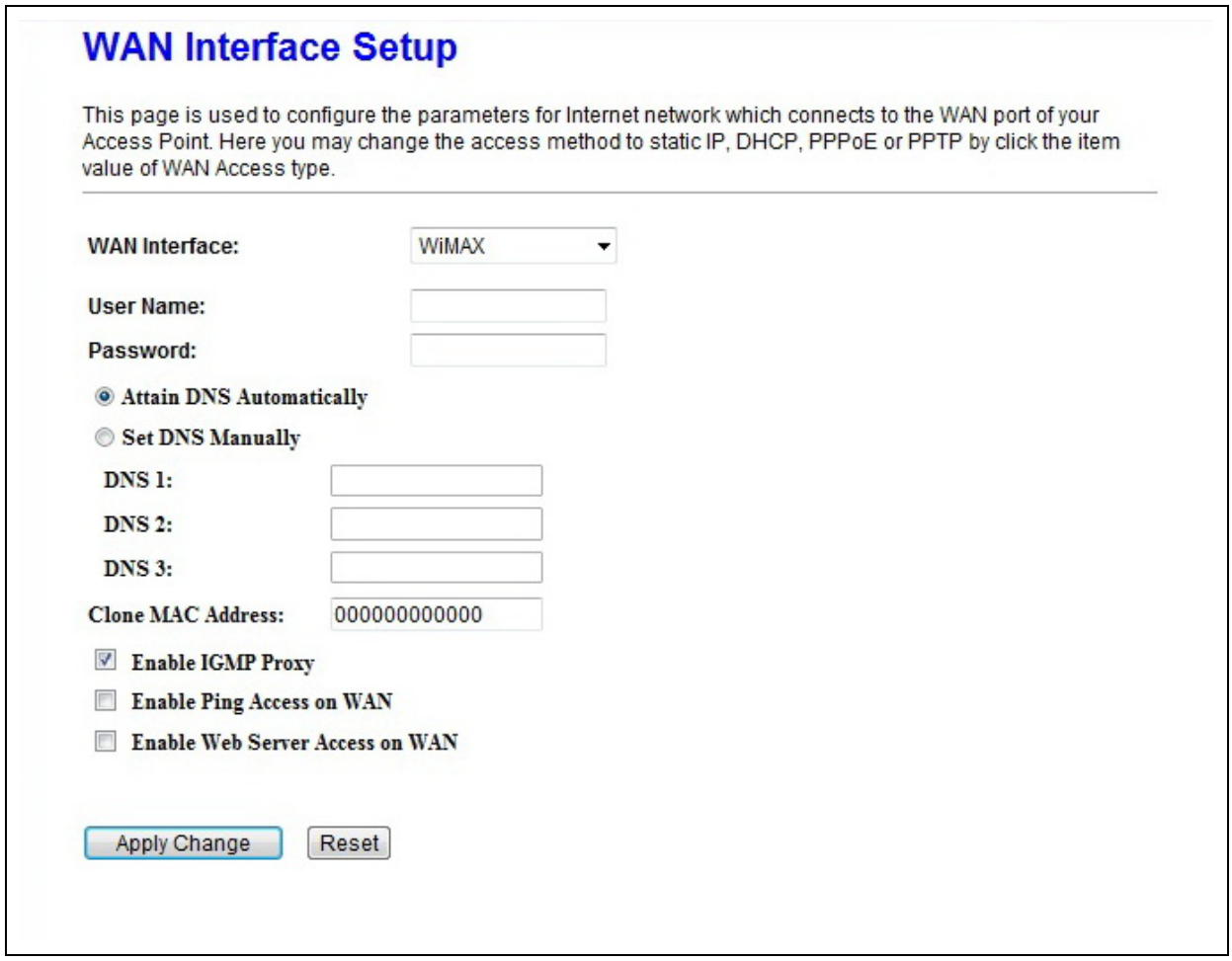
5.1.1.2 WAN Interface – Ethernet Port

If you are using an Ethernet cable to connect the Internet, please select **Ethernet port**.



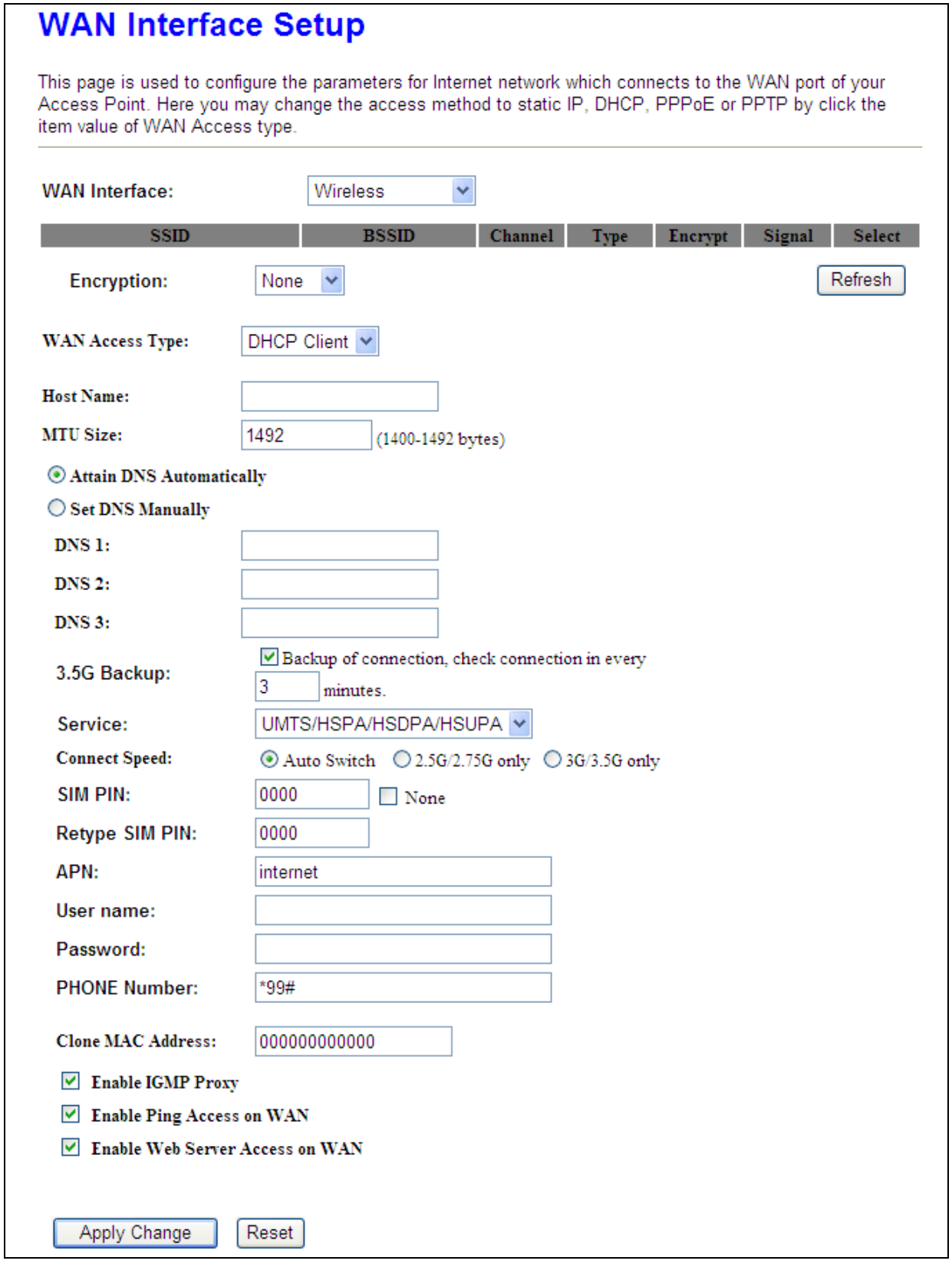
5.1.1.3 WAN Interface – WiMAX

If you are using WiMAX as the WAN Type, please select **WiMAX** and fill in the required information as follows to directly access Internet via connected WiMAX adapter.


WAN Interface Setup
This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE or PPTP by click the item value of WAN Access type.
WAN Interface:
WiMAX
User Name:
Password:
Attain DNS Automatically
Set DNS Manually
DNS 1:
DNS 2:
DNS 3:
Clone MAC Address:
000000000000
Enable IGMP Proxy
Enable Ping Access on WAN
Enable Web Server Access on WAN
Apply Change
Reset

5.1.1.4 WAN Access Type – Wireless

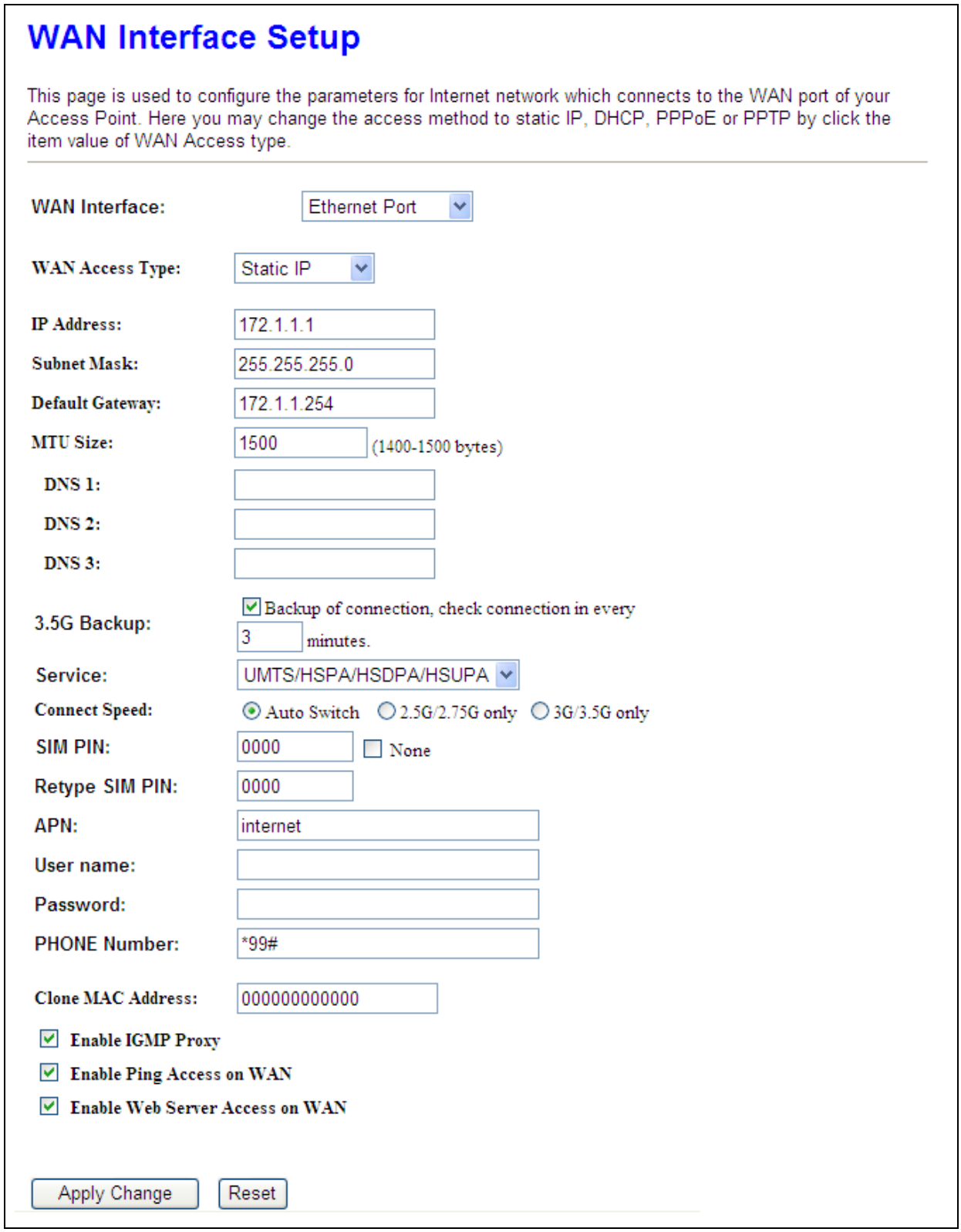
If you are connecting the internet via wireless, please select **Wireless** and its associated settings will show up underneath at the same time.



You can see a list of available Wireless networks. Select you preferred one to connect and the Encryption type form the drop-down list.

5.1.1.5 WAN Access Type – Static IP

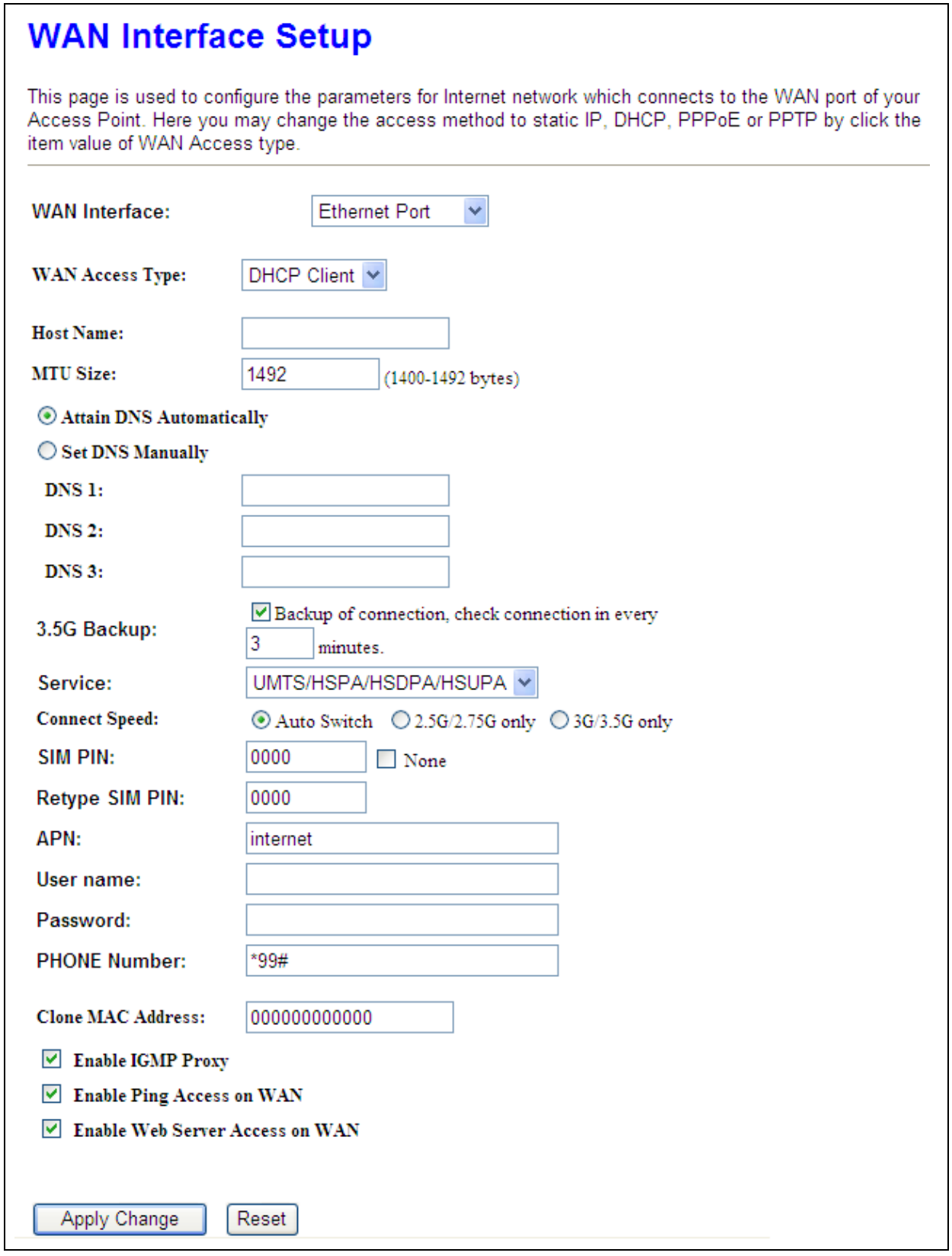
If you applied for a **Static IP** connection type from ISP, please follow the steps to set up your WAN connection.



Item	Description
IP Address	Please enter the IP address which is provided by your ISP. If you don't have it, please contact your ISP.
Subnet Mask	Please enter the Subnet Mask address.
Default Gateway	Input ISP Default Gateway Address. If you don't know, please check with your ISP.
MTU Size	The term **Maximum transmission unit** refers to the size (in bytes) of the largest PDU that a given layer of a communications protocol can pass onwards. Users can improve network efficiency by adjusting the value of MTU. Most of OS will give users a default value which is fit for most of users. Users can modify this value also. Please enter value, max number is 1500 bytes.
DNS	If ISP provides DNS information, please select **Attain DNS automatically**. Or you should select **Set DNS Manually**, and then input the DNS address.
3.5G Backup	The default interval between the two connection detection is 3 minutes, and the range is from 1 to 60 minutes. Once Internet connection is disconnected, the system automatically connects Internet via 3.5G adapter. If 3.5G signal is not available, it starts to search downward for 3/2.75/2.5G signals until none existed.
Clone MAC	If your ISP asks you to enter a specific MAC Address, please input the correct info at the column.
Enable IGMP Proxy	The **Internet Group Management Protocol** (**IGMP**) is a communication protocol used to manage the membership of Internet Protocol multicast groups. IGMP is used by IP hosts and adjacent multicast routers to establish multicast group memberships. You can choose to enable **IGMP Proxy** to provide service.
Enable Ping Access on WAN	To enable WAN ICMP response.
Enable Web Server Access on WAN	Enable Web Server Access function from WAN side.
Apply Change & Reset	Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.

5.1.1.6 WAN Access -- Dynamic IP

If your WAN access type is **Dynamic IP**, please complete the settings as following instructions.



Item	Description
Host Name	The host name is optional; but if your ISP requires you to input a specific host name, please put it in, for example, 11n Broadband Router applied from ISP. Generally, Cable Modem will provide the hostname information.
MTU Size	MTU stands for Maximum Transmission Unit. For Static IP connection, the default MTU should be provided by computer operating systems (OS). Advanced users can set the MTU manually for increasing the internet performance. The largest number is 1492 byte
DNS	If ISP provides you DNS information, please select **Attain DNS automatically,** otherwise select **Set DNS Manually** and input the DNS information into the blank.
3.5G Backup	The default interval between the two connection detection is 3 minutes, and the range is from 1 to 60 minutes. Once Internet connection is disconnected, the system automatically connects Internet via 3.5G adapter. If 3.5G signal is not available, it starts to search downward for 3/2.75/2.5G signals until none existed.
Clone MAC Address	Copy the MAC address from the device you had registered to your ISP if your ISP asks for the specific MAC Address.
Enable IGMP Proxy	The **Internet Group Management Protocol (IGMP)** is a communication protocol used to manage the membership of Internet Protocol multicast groups. IGMP is used by IP hosts and adjacent multicast routers to establish multicast group memberships. You can choose to enable **IGMP Proxy** to provide service.
Enable Ping Access on WAN	Select **Enable Ping Access on WAN**, will make WAN IP address response to any ping request from Internet users. It is a common way for hacker to ping public WAN IP address, to see is there any WAN IP address available.
Enable Web Server Access on WAN	This option is to enable Web Server Access function on WAN.
Apply Change & Reset	Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.

5.1.1.7 WAN Access Type -- PPPoE

If you applied for a **PPPoE** connection type from ISP, please follow the steps to set up your WAN connection.

WAN Interface Setup

This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE or PPTP by click the item value of WAN Access type.

WAN Interface: Ethernet Port

WAN Access Type: PPPoE

User Name:

Password:

Service Name:

Connection Type: Continuous Connect Disconnect

Idle Time: 5 (1-1000 minutes)

MTU Size: 1452 (1360-1492 bytes)

Attain DNS Automatically

Set DNS Manually

DNS 1:

DNS 2:

DNS 3:

3.5G Backup: Backup of connection, check connection in every 3 minutes.

Service: UMTS/HSPA/HSDPA/HSUPA

Connect Speed: Auto Switch 2.5G/2.75G only 3G/3.5G only

SIM PIN: 0000 None

Retype SIM PIN: 0000

APN: internet

User name:

Password:

PHONE Number: *99#

Clone MAC Address: 000000000000

Enable IGMP Proxy

Enable Ping Access on WAN

Enable Web Server Access on WAN

Apply Change Reset

Item	Description
User Name	Input your user name supplied by ISP. If you don't know, please check with your ISP.
Password	Input your Password supplied by ISP
Service Name	Input the service name supplied by ISP.
Connection Type	It has three types: **Continuous, Connect on Demand,** and **Manual.**
Idle Time	It is the time of inactivity before disconnecting your PPPoE session. Enter an Idle Time (in minutes) to define a maximum period of time for which the Internet connect is maintained during inactivity. If the connection is inactive for longer than the defined Idle Time, then the connection will be dropped. Either set this to zero or enable Auto-reconnect to disable this feature.
MTU Size	MTU stands for Maximum Transmission Unit. For PPPoE connection, the default MTU should be provided by computer operating systems (OS). Advanced users can set the MTU manually for increasing the internet performance. The largest number allowed by Ethernet at the network layer is 1492 byte
DNS	If ISP provides you DNS information, please select **Attain DNS automatically,** otherwise select **Set DNS Manually** and input the DNS information into the blank.
3.5G Backup	The default interval between the two connection detection is 3 minutes, and the range is from 1 to 60 minutes. Once Internet connection is disconnected, the system automatically connects Internet via 3.5G adapter. If 3.5G signal is not available, it starts to search downward for 3/2.75/2.5G signals until none existed.

Clone MAC Address	Copy the MAC address from the device you had registered to your ISP if your ISP asks for the specific MAC Address.
Enable IGMP Proxy	The **Internet Group Management Protocol (IGMP)** is a communications protocol used to manage the membership of Internet Protocol multicast groups. IGMP is used by IP hosts and adjacent multicast routers to establish multicast group memberships. You can choose to enable **IGMP Proxy** to provide service.
Enable Ping Access on WAN	Select **Enable Ping Access on WAN**, will make WAN IP address response to any ping request from Internet users. It is a common way for hacker to ping public WAN IP address, to see is there any WAN IP address available.
Enable Web Server Access on WAN	This option is to enable **Web Server Access** function on WAN.
Apply Changes & Reset	Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.

5.1.1.8 WAN Access Type -- PPTP

If you have applied for a **PPTP** connection type from ISP, please follow the steps to set up your WAN connection.\

WAN Interface Setup

This page is used to configure the parameters for Internet network which connects to the WAN port of your Access Point. Here you may change the access method to static IP, DHCP, PPPoE or PPTP by click the item value of WAN Access type.

WAN Interface: Ethernet Port

WAN Access Type: PPTP

IP Address: 172.1.1.2

Subnet Mask: 255.255.255.0

Server IP Address: 172.1.1.1

User Name:

Password:

MTU Size: 1460 (1400-1460 bytes)

☐ Request MPPE Encryption

◉ Attain DNS Automatically

○ Set DNS Manually

DNS 1:

DNS 2:

DNS 3:

3.5G Backup: ☑ Backup of connection, check connection in every 3 minutes.

Service: UMTS/HSPA/HSDPA/HSUPA

Connect Speed: ◉ Auto Switch ○ 2.5G/2.75G only ○ 3G/3.5G only

SIM PIN: 0000 ☐ None

Retype SIM PIN: 0000

APN: internet

User name:

Password:

PHONE Number: *99#

Clone MAC Address: 000000000000

☑ Enable IGMP Proxy

☑ Enable Ping Access on WAN

☑ Enable Web Server Access on WAN

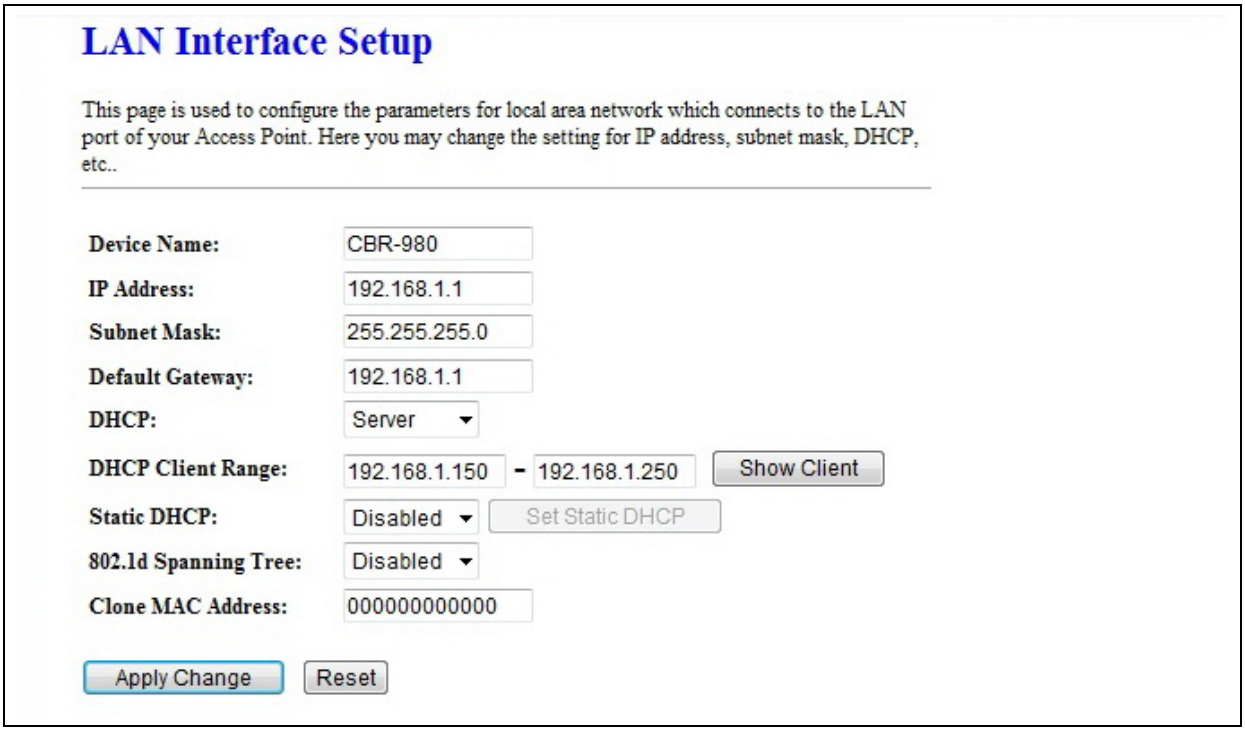
Apply Change Reset

Item	Description
IP Address	Input your IP Address supplied by ISP. If you don't know, please check with your ISP.
Subnet Mask	Input Subnet Mask, normally it is **255.255.255.0.**
Server IP Address	Input your Server IP Address supplied by ISP. If you don't know, please check with your ISP.
User Name	Input the PPTP Account supplied by ISP, for example. If you don't know, please check with your ISP.
Password	Input the Password supplied by ISP.
MTU	MTU stands for Maximum Transmission Unit. For PPPoE connection, the default MTU should be provided by computer operating systems (OS). Advanced users can set the MTU manually for increasing the internet performance. The largest number allowed is 1460 byte
Request MPPPE Encryption	**Microsoft Point-to-Point Encryption (MPPE)** encrypts data in Point-to-Point Protocol (PPP)-based dial-up connections or Point-to-Point Tunneling Protocol (PPTP) virtual private network (VPN) connections. 128-bit key (strong), 56-bit key, and 40-bit key (standard) MPPE encryption schemes are supported. MPPE provides data security for the PPTP connection that is between the VPN client and the VPN server.
DNS	If ISP provides you DNS information, please select **Attain DNS automatically**, otherwise select **Set DNS Manually** and input the DNS information into the blank.
3.5G Backup	The default interval between the two connection detection is 3 minutes, and the range is from 1 to 60 minutes. Once Internet connection is disconnected, the system automatically connects Internet via 3.5G adapter. If 3.5G signal is not available, it starts to search downward for 3/2.75/2.5G signals until none

	existed.
Clone MAC Address	Copy the MAC address from the device you had registered to your ISP if your ISP asks for the specific MAC Address.
Enable IGMP Proxy	The **Internet Group Management Protocol (IGMP)** is a communications protocol used to manage the membership of Internet Protocol multicast groups. IGMP is used by IP hosts and adjacent multicast routers to establish multicast group memberships. You can choose to enable **IGMP Proxy** to provide service.
Enable Ping Access on WAN	Select **Enable Ping Access on WAN**, will make WAN IP address response to any ping request from Internet users. It is a common way for hacker to ping public WAN IP address, to see is there any WAN IP address available.
Enable Web Server Access on WAN	This option is to enable **Web Server Access** function on WAN.
Apply Changes & Reset	Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.

5.1.2 LAN Interface Setup

This page is used to configure the parameters for local area network that connects to the LAN ports of your WLAN Broadband Router. Here you may change the setting for IP address, subnet mask, DHCP, etc.

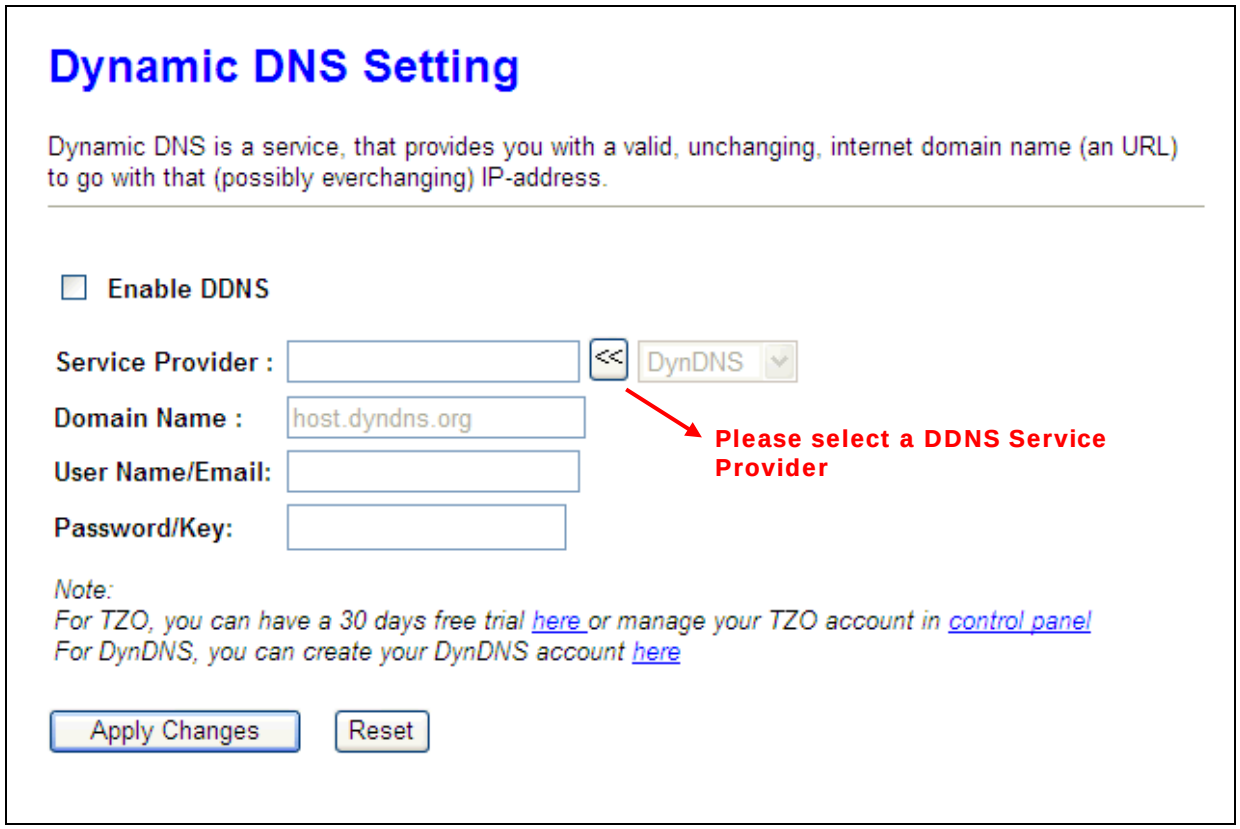


Item	Description
IP Address	The default IP address is **192.168.1.1**
Subnet Mask	Please enter the Subnet Mask address
Default Gateway	Please enter the Default Gateway address for LAN interface.
DHCP	Click to select **Disabled, Client** or **Server** in different operation mode of LAN access point.
DHCP Client Range	Fill in the start IP address and end IP address to allocate a range of IP addresses; client with DHCP function set will be assigned an IP address from the range
802.1d Spanning Tree	IEEE 802.1d **Spanning Tree Protocol** (**STP**) is a link layer network protocol that ensures a loop-free topology for any bridged LAN. Select enable or disable the IEEE 802.1d Spanning Tree function from pull-down menu.
Clone MAC Address	If your ISP asks you to enter a specific MAC Address, please input the correct info at the column.
Apply Change & Reset	Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.

5.1.3 Dynamic DNS Setting

You can assign a fixed host and domain name to a dynamic Internet IP address. Each time the router boots up, it will re-register its domain-name-to-IP-address mapping with the DDNS service provider. This is the way Internet users can access the router through a domain name instead of its IP address.

Note: make sure that you have registered with a DDNS service provider before enabling this feature.


Dynamic DNS Setting
Dynamic DNS is a service, that provides you with a valid, unchanging, internet domain name (an URL) to go with that (possibly everchanging) IP-address.
Enable DDNS
Service Provider :
<<
DynDNS
Domain Name :
host.dyndns.org
User Name/Email:
Password/Key:
Please select a DDNS Service Provider
Note:
For TZO, you can have a 30 days free trial here or manage your TZO account in control panel
For DynDNS, you can create your DynDNS account here
Apply Changes
Reset

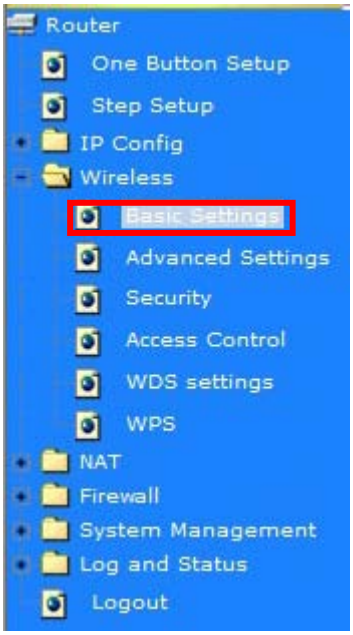
Please enter **Domain Name**, **User Name/Email**, and **Password/Key**. After entering, click on **Apply Changes** to save the setting, or you may click on **Reset** to clear all the input data.

Item	Description
Enable/Disable DDNS	Select enable to use DDNS function. Each time your IP address to WAN is changed, and the information will be updated to DDNS service provider automatically.
Service Provider	Choose correct Service Provider from drop-down list, here including DynDNS, TZO, ChangeIP, Eurodns, OVH, NO-IP,

	ODS, Regfish embedded in CBR-980.
User Name/Email	User name is used as an identity to login Dynamic-DNS service.
Password/Key	Password is applied to login Dynamic-DNS service.
Apply & Cancel	Click on **Apply** button to continue. Click on **Cancel** button to clear the setting on this page.

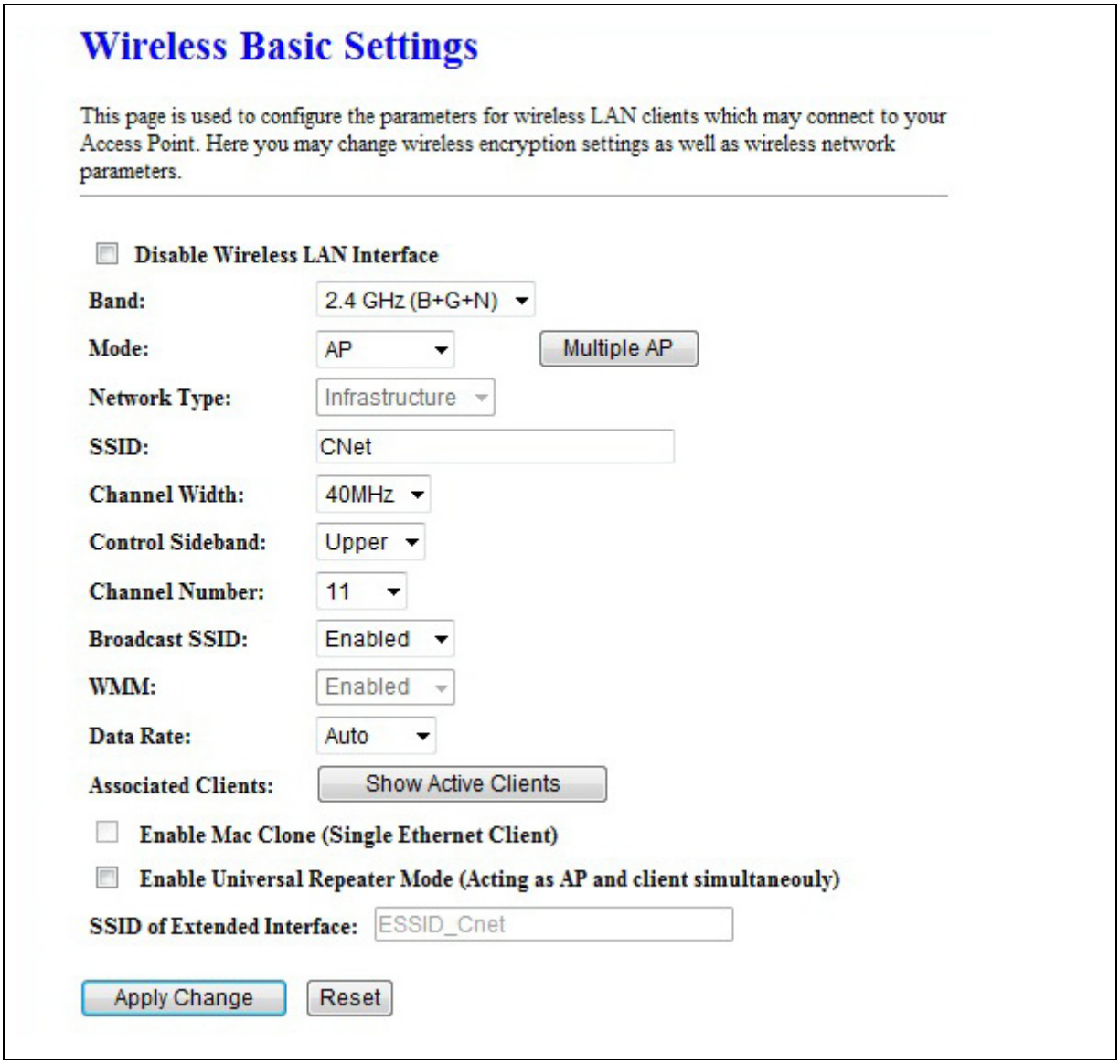
5.2 Wireless Setup

The category includes **Basic Settings**, **Advanced Settings**, **Security**, **Access Control**, **WDS settings**, and **WPS**. Please read below for the setting instruction.



5.2.1 Wireless Basic Settings

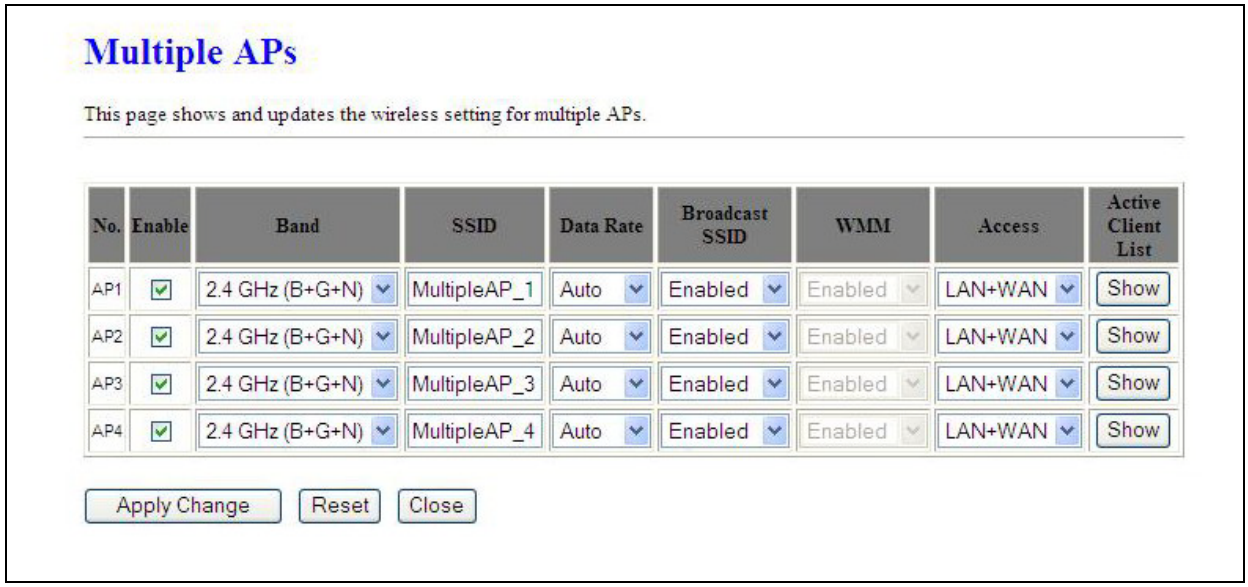
The Wireless Basic Settings include Band, Mode, SSID, Channel Number and other wireless settings.



Item	Description
Disable Wireless LAN Interface	Turn off the wireless service.
Band	Please select the frequency. It has 6 options: 2.4 GHz (B/G/N/B+G/G+N/B+G+N).
Mode	Please select the mode. It has 3 modes to select:(AP, Client, WDS, AP+WDS). **Multiple APs** provides users another 4 different SSID for connection. Users can add or limit the properties for each connection. Please check Section 5.2.1.1
SSID	Service Set identifier, the default SSID is **CNet**, users can define to any.
Channel Width	Please select the channel width, it has 2 options: 20MHZ, and 40MHZ.
Control Sideband	Enable this function will control your router use lower or upper channel.
Channel Number	Please select the channel; it has Auto, 1, 2~11 or 13 options.
Broadband SSID	User may choose to enable **Broadcast SSID** or not.
Data Rate	Please select the data transmission rate.
Associate Clients	Check the AP connectors and the Wireless connecting status.
Enable MAC Clone (Single Ethernet Client)	Clone the MAC address for ISP to identify.
Enable Universal Repeater Mode (Acting as AP and Client simultaneously)	Allow to equip with the wireless way conjunction upper level, provide the bottom layer user link in wireless and wired way in the meantime. (The IP that bottom layer obtains is from upper level.) Please check Section 5.2.1.2
SSID of Extended Interface	While linking the upper level device in wireless way, you can set SSID to give the bottom layer user search.
Apply Change & Reset	Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.

5.2.1.1 Multiple APs

Multiple APs provides users another 4 different SSIDs for connection. Each SSID could be set with different data rate, WMM and access type.



Item	Description
Enable	Enable or disable the service.
Band	Select the frequency.
SSID	Enter the SSID.
Data Rate	Select the data transmission rate.
Access	Enable this function can let clients use two access types: a. LAN+WAN: the client can access to the Internet and access in the router's GUI. b. WAN: the client can only access to the Internet.
Active Client List	Display the properties of the client which is connecting successfully.
Apply Changes	Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.

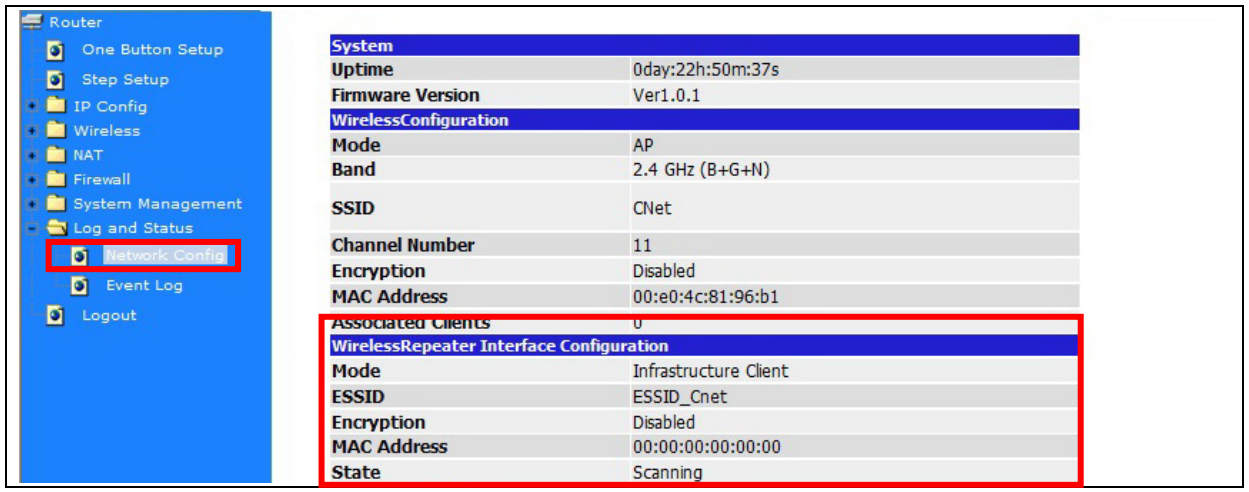
5.2.1.2 Enable Universal Repeater Mode (Acting as AP Client simultaneously)

The router can act as Station and AP at the same time. It can use Station function to connect to a Root AP and use AP function to service all wireless stations within its coverage.

Example: When users enable the Universal Repeater to connect to the upper level device, please fill in the upper level device's channel and SSID. Click on **Apply Changes** to save the settings. (Please disable the DHCP service first)

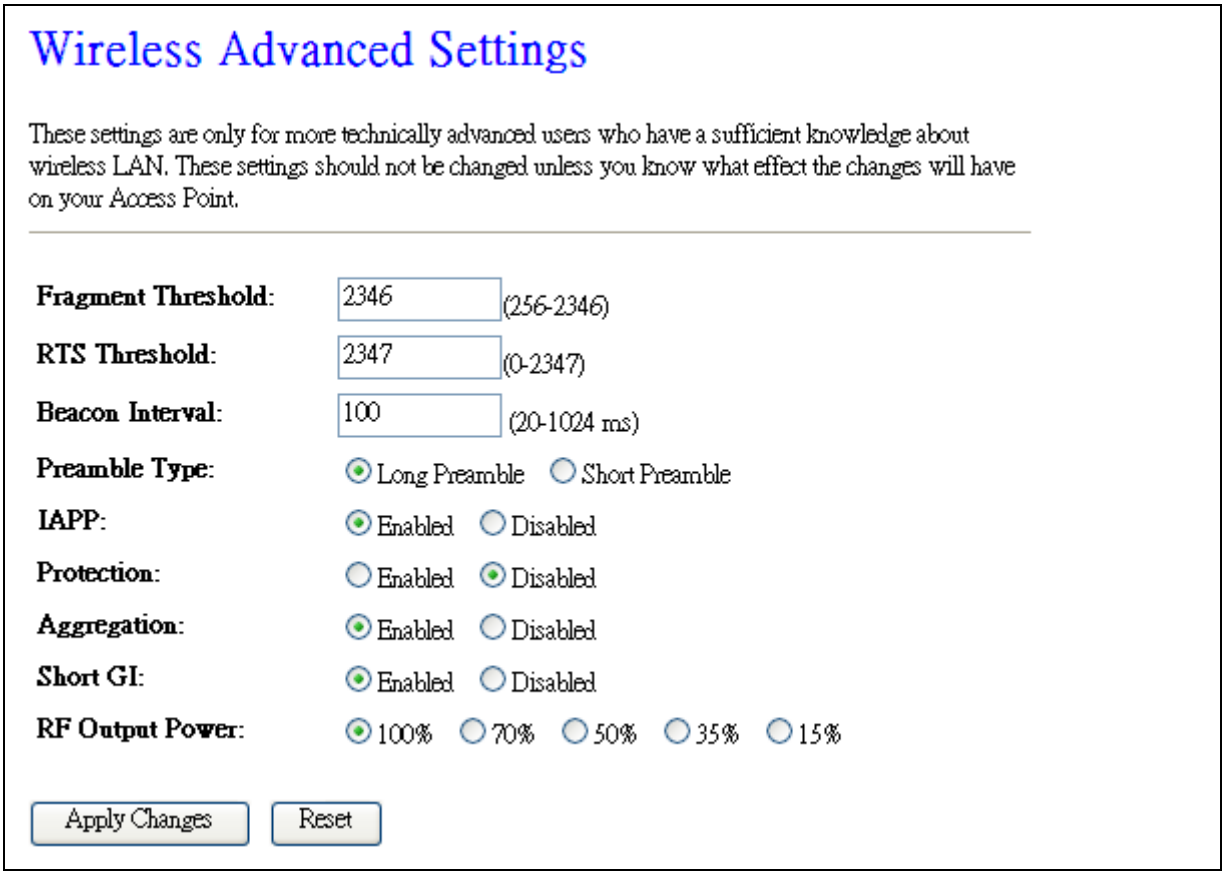
Channel Number: 11
Broadcast SSID: Enabled
WMM: Enabled
Data Rate: Auto
Associated Clients: Show Active Clients
Enable Mac Clone (Single Ethernet Client)
Enable Universal Repeater Mode (Acting as AP and client simultaneouly)
SSID of Extended Interface: ESSID_Cnet
Apply Change
Reset

Users can go to the network Config section to check the information which about "Wireless Repeater Interface Configuration".



5.2.2 Wireless Advanced Settings

In Advanced Settings page, more 802.11 related parameters are tunable


Wireless Advanced Settings
These settings are only for more technically advanced users who have a sufficient knowledge about wireless LAN. These settings should not be changed unless you know what effect the changes will have on your Access Point.
Fragment Threshold: 2346 (256-2346)
RTS Threshold: 2347 (0-2347)
Beacon Interval: 100 (20-1024 ms)
Preamble Type: Long Preamble Short Preamble
IAPP: Enabled Disabled
Protection: Enabled Disabled
Aggregation: Enabled Disabled
Short GI: Enabled Disabled
RF Output Power: 100% 70% 50% 35% 15%
Apply Changes
Reset

Item	Description
Fragment Threshold	To identify the maxima length of packet, the over length packet will be fragmentized. The allowed range is 256-2346, and default length is 2346
RTS Threshold	This value should remain at its default setting of 2347. The range is 0~2347. Should you encounter inconsistent data flow, only minor modifications are recommended. If a network packet is smaller than the present RTS threshold size, the RTS/CTS mechanism will not be enabled. The router sends Request to Send (RTS) frames to a particular receiving station and negotiates the sending of a data frame. After receiving an RTS, the wireless station responds with a Clear to Send (CTS) frame to acknowledge the right to begin transmission. Fill the range from 0 to 2347 into this blank.
Beacon Interval	Beacons are packets sent by an access point to synchronize a wireless network. Specify a beacon interval value. The allowed setting range is 20-1024 ms.
Preamble Type	PLCP is Physical layer convergence protocol and PPDU is PLCP protocol data unit during transmission, the PSDU shall be appended to a PLCP preamble and header to create the PPDU. It has 2 options: Long Preamble and Short Preamble.
IAPP	Inter-Access Point Protocol is a recommendation that describes an optional

	extension to IEEE 802.11 that provides wireless access-point communications among multivendor systems.
Protection	Please select to enable wireless protection or not.
Aggregation	Enable this function will combine several packets to one and transmit it. It can reduce the problem when mass packets are transmitting.
Short GI	Users can get better wireless transmission efficiency when they enable this function.
RF Output Power	Users can adjust RF output power to get the best wireless network environment. Users can choose from 100%, 70%, 50%, 35%, and 15%.
Apply Changes & Reset	Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.

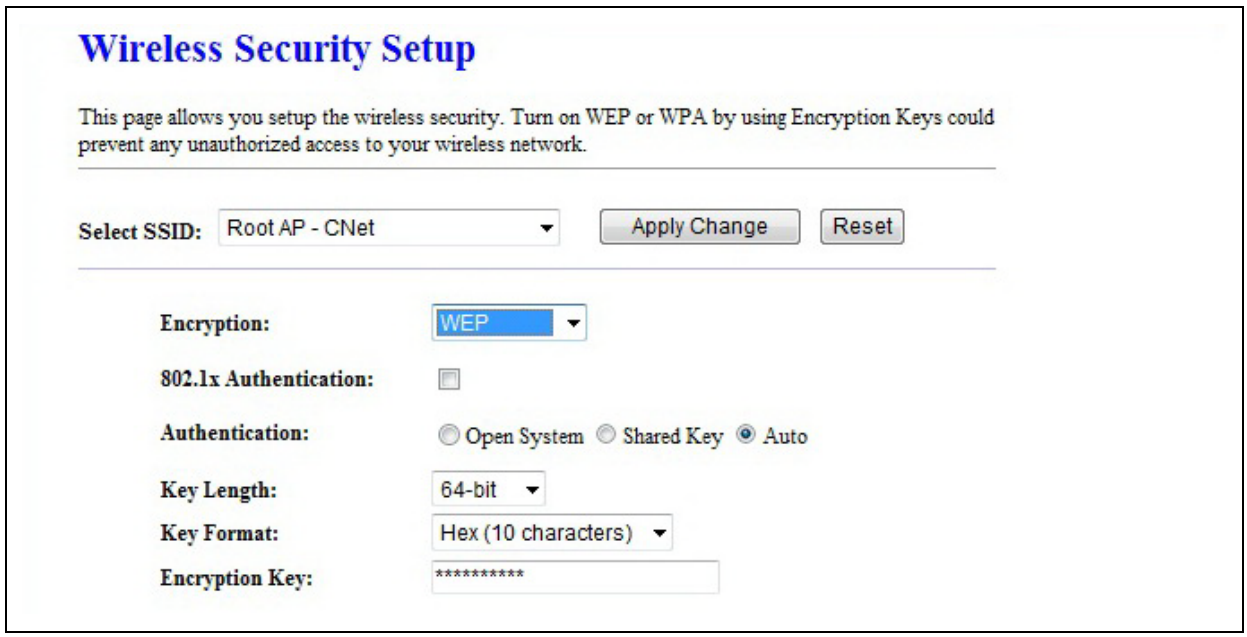
5.2.3 Wireless Security Setup

Here users define the security type and level of the wireless network. Selecting different methods provides different levels of security. **Please note that using any encryption may cause a significant degradation of data throughput on the wireless link**. There are five Encryption types supported: “None”, “WEP”, “WPA (TKIP)”, ”WPA2(AES)”, and “WPA2 Mixed”.

Wireless Security Setup
This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.
Select SSID:
Root AP - CNet
Apply Change
Reset
Encryption:
None
802.1x Authentication:

1. Encryption -- WEP Key

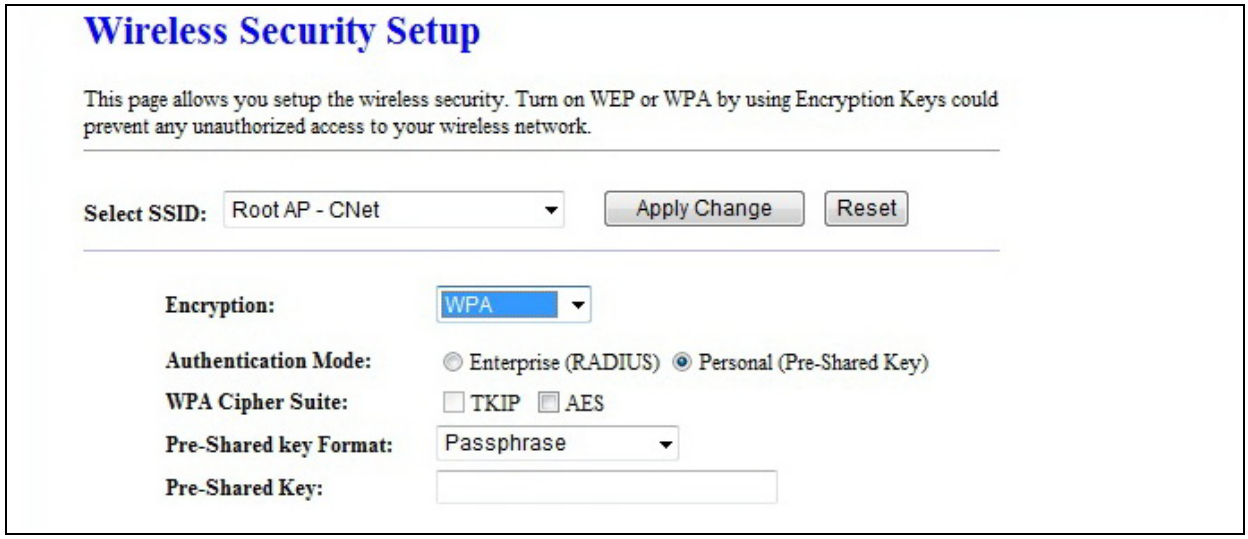
1.1 Set WEP Key: This section provides 64bit and 128bit WEP encryptions and two different shared key formats (ASCII and Hex) for wireless network.


Wireless Security Setup
This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.
Select SSID: Root AP - CNet
Apply Change
Reset
Encryption: WEP
802.1x Authentication:
Authentication: Open System Shared Key Auto
Key Length: 64-bit
Key Format: Hex (10 characters)
Encryption Key: **********

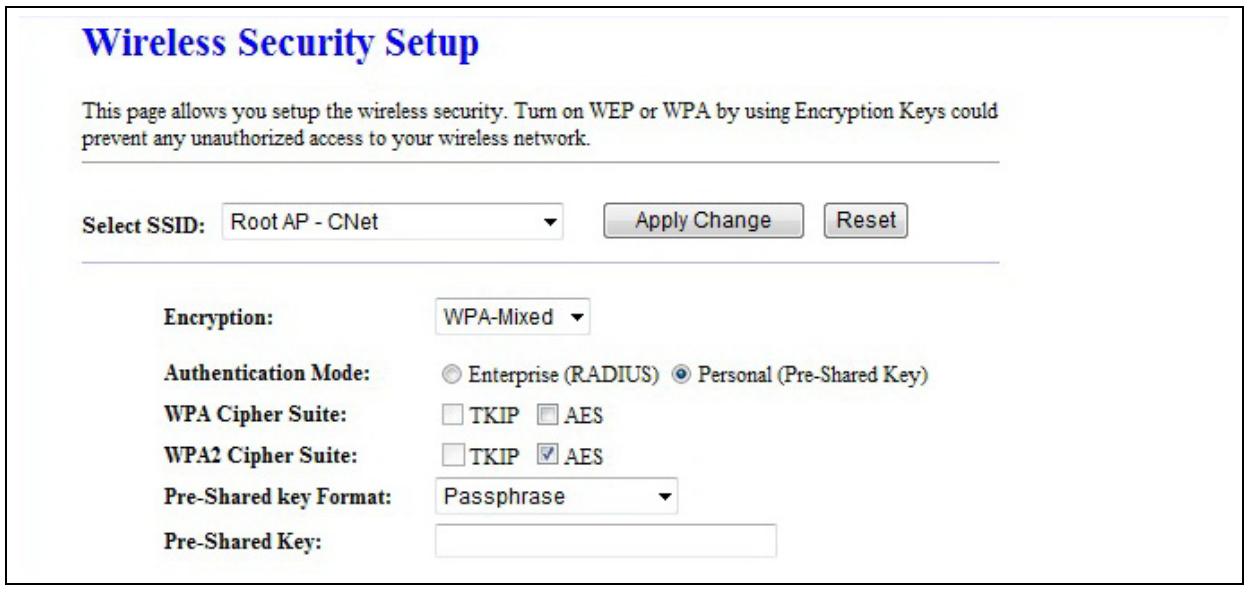
802.1x Authentication: It is a safety system by using authentication to protect your wireless network.

2. Encryption – WPA (WPA, WPA2, and WPA2 Mixed), WPA Authentication Mode

- Enterprise (RADIUS): Please fill in the RADIUS server Port, IP Address, and Password


Wireless Security Setup
This page allows you setup the wireless security. Turn on WEP or WPA by using Encryption Keys could prevent any unauthorized access to your wireless network.
Select SSID: Root AP - CNet
Apply Change
Reset
Encryption: WPA
Authentication Mode: Enterprise (RADIUS) Personal (Pre-Shared Key)
WPA Cipher Suite: TKIP AES
Pre-Shared key Format: Passphrase
Pre-Shared Key:

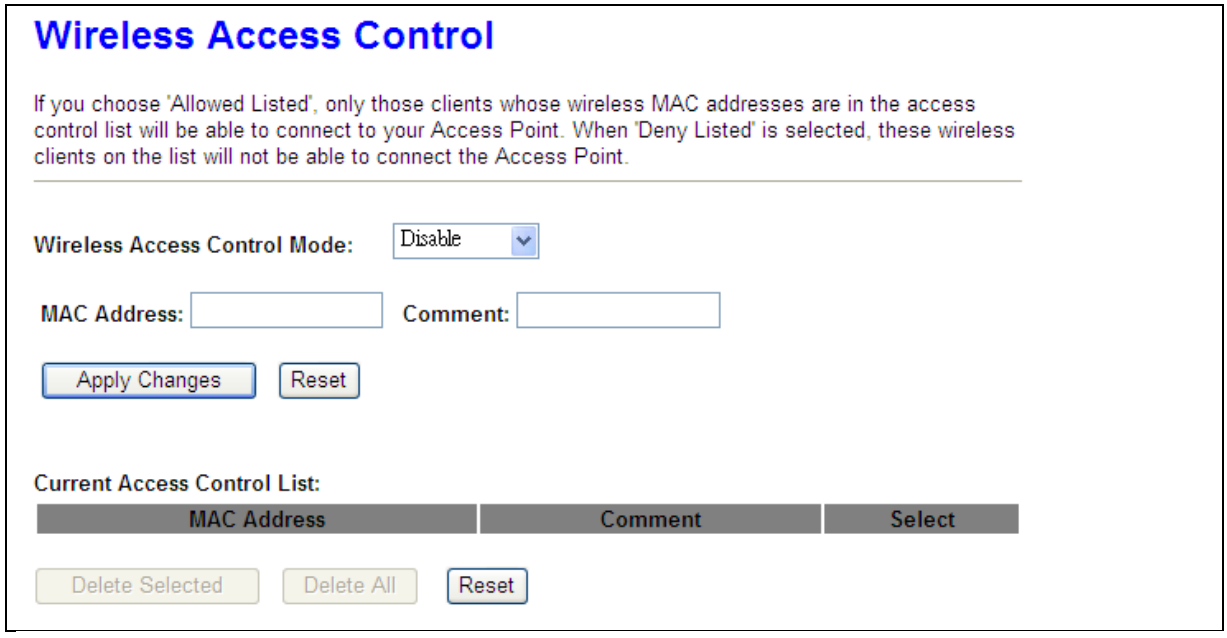
- Personal (Pre-Shared Key): Pre-Shared Key type is ASCII Code; the length is between 8 to 63 characters. If the key type is Hex, the key length is 64 characters



3. Apply Change & Reset: Click on **'Apply Changes'** to save setting data. Or click **'Reset'** to reset all the input data.

5.2.4 Wireless Access Control

Access Control allows user to block or allow wireless clients to access this router. Users can select the access control mode, then add a new MAC address with a simple comment and click on "Apply Changes" to save the new addition. To delete a MAC address, select its corresponding checkbox under the **Select** column and click on "Delete Selected" button.

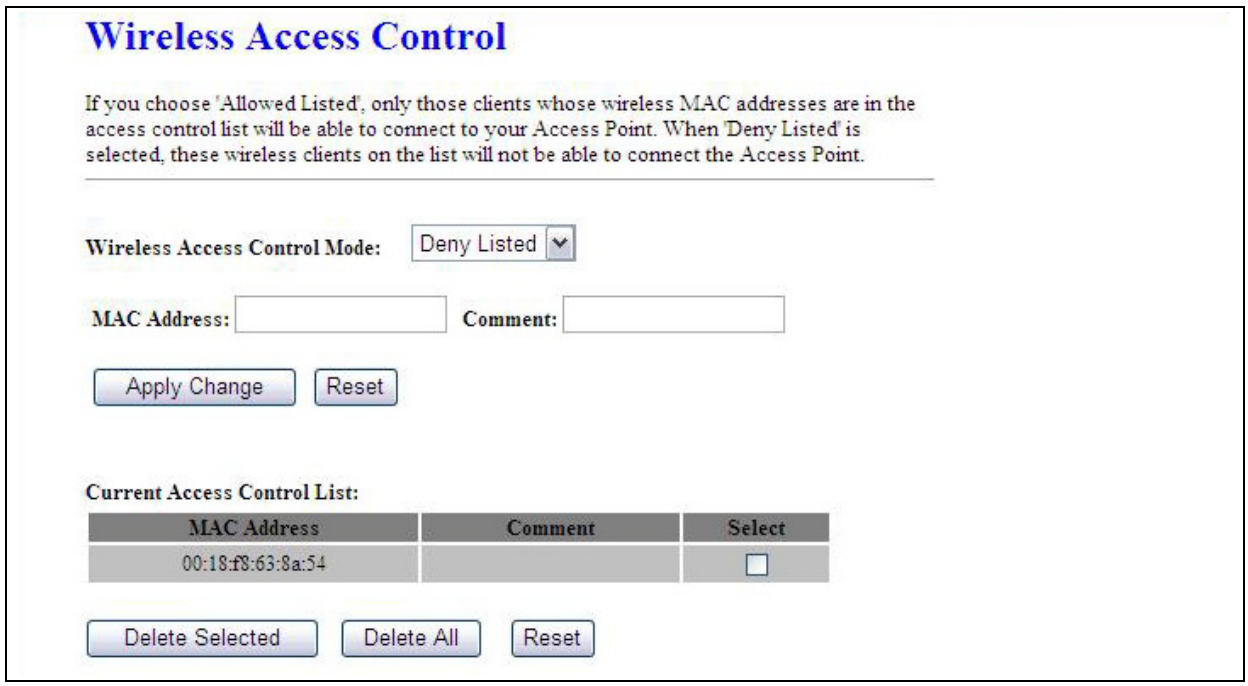

Wireless Access Control
If you choose 'Allowed Listed', only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When 'Deny Listed' is selected, these wireless clients on the list will not be able to connect the Access Point.
Wireless Access Control Mode:
Disable
MAC Address:
Comment:
Apply Changes
Reset
Current Access Control List:
MAC Address
Comment
Select
Delete Selected
Delete All
Reset

Take the wireless card as the example.

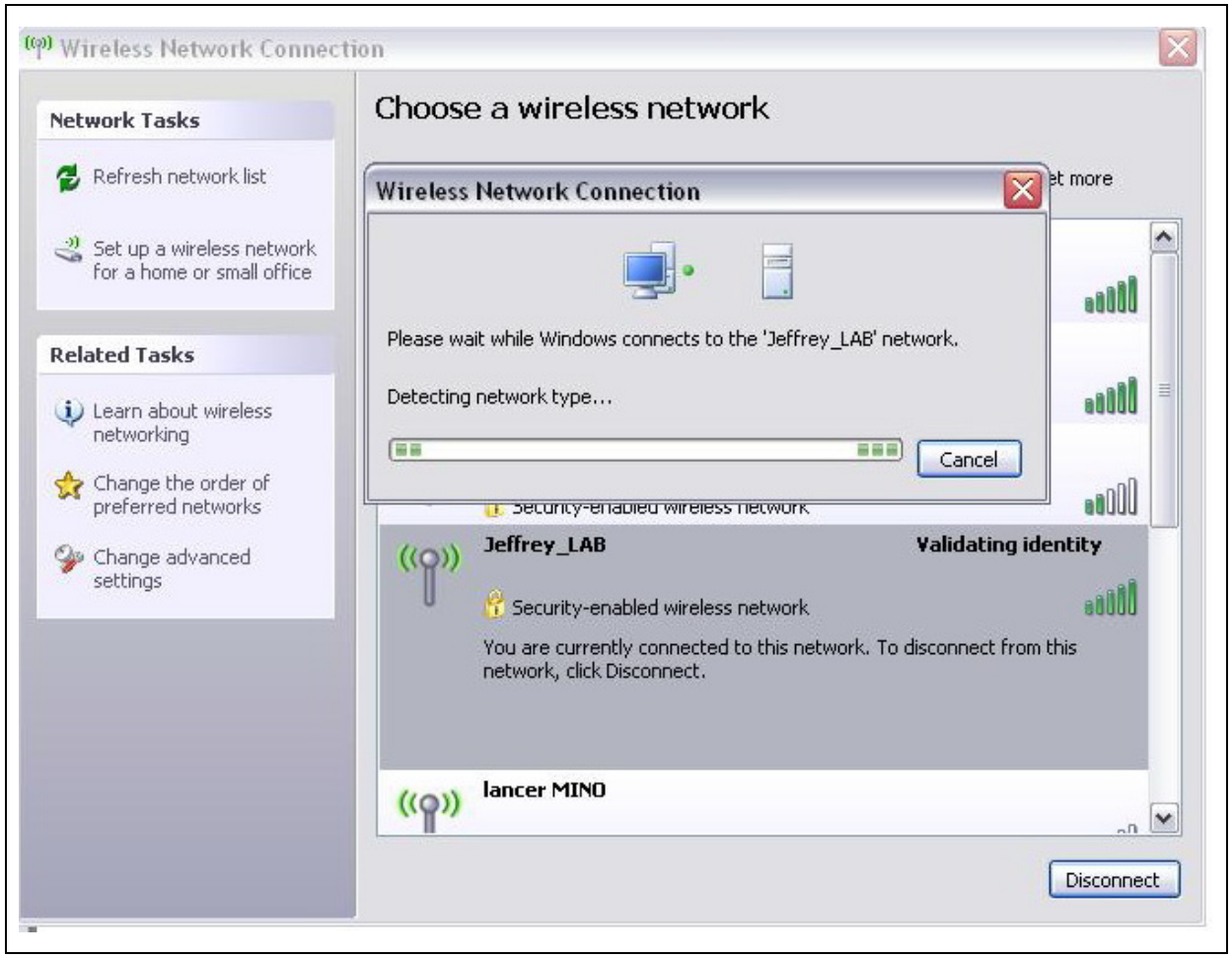
(1) Here is the example. Please select **Deny Listed** in **Wireless Access Control Mode** first, and then fill in the MAC address what you plan to block in the MAC Address field. Click **Apply Changes** to save the setting.

Wireless Access Control
If you choose 'Allowed Listed', only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When 'Deny Listed' is selected, these wireless clients on the list will not be able to connect the Access Point.
Wireless Access Control Mode:
Deny Listed
MAC Address:
0018F8638A54
Comment:
Apply Change
Reset
Current Access Control List:
MAC Address
Comment
Select
Delete Selected
Delete All
Reset

(2) The MAC address what you set will be displayed on the **Current Access Control List**.

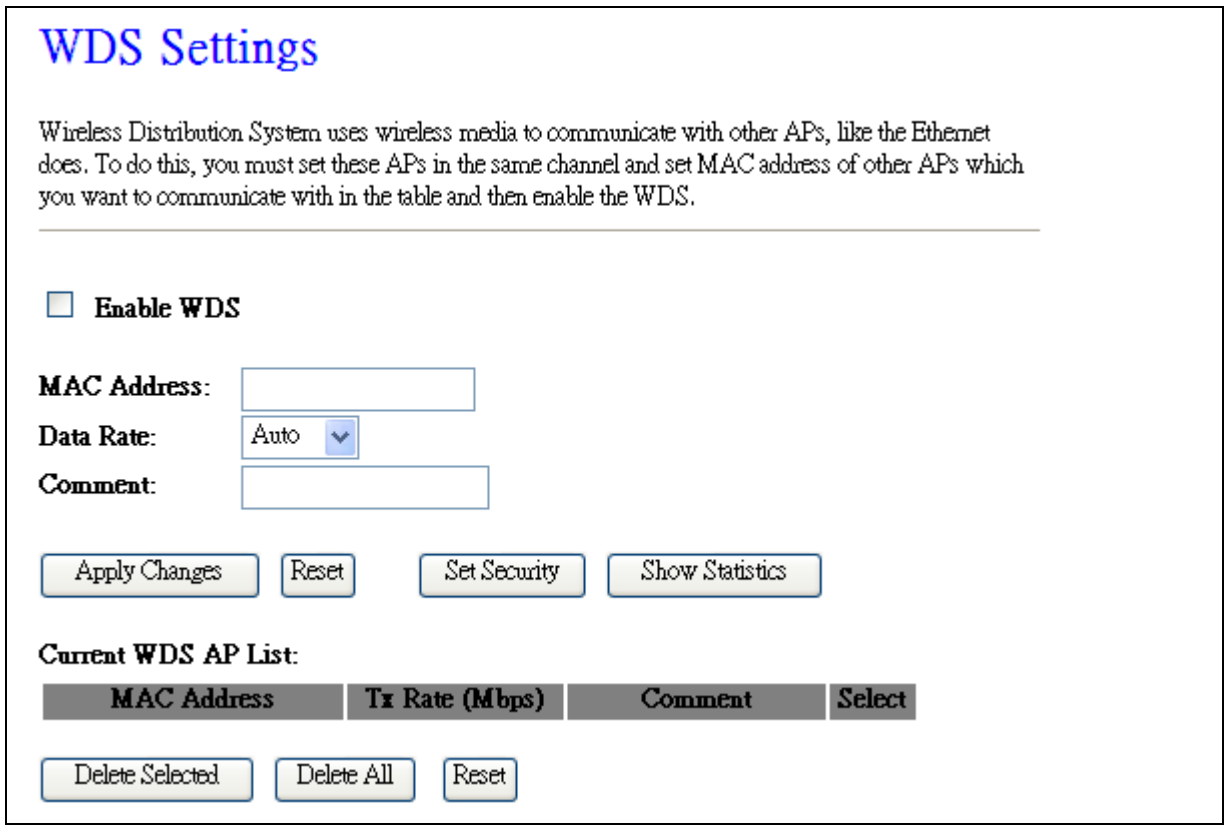

Wireless Access Control
If you choose 'Allowed Listed', only those clients whose wireless MAC addresses are in the access control list will be able to connect to your Access Point. When 'Deny Listed' is selected, these wireless clients on the list will not be able to connect the Access Point.
Wireless Access Control Mode:
Deny Listed
MAC Address:
Comment:
Apply Change
Reset
Current Access Control List:
MAC Address
Comment
Select
00:18:f8:63:8a:54
Delete Selected
Delete All
Reset

(3) The wireless client will be denied by the wireless router.

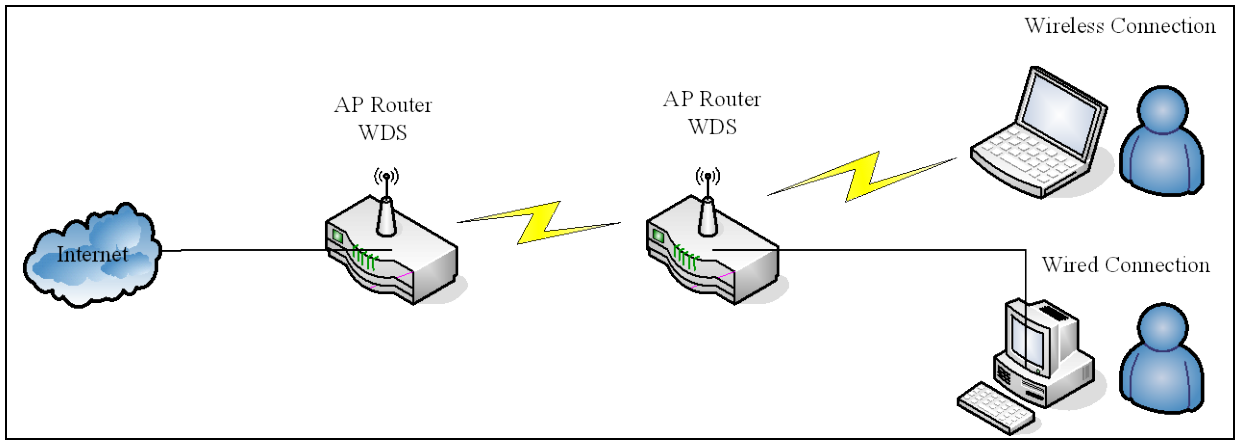

Wireless Network Connection
Network Tasks
Refresh network list
Set up a wireless network for a home or small office
Related Tasks
Learn about wireless networking
Change the order of preferred networks
Change advanced settings
Choose a wireless network
Wireless Network Connection
Please wait while Windows connects to the 'Jeffrey_LAB' network.
Detecting network type...
Cancel
Jeffrey_LAB
Validating identity
Security-enabled wireless network
You are currently connected to this network. To disconnect from this network, click Disconnect.
lancer MINO
Disconnect

5.2.5 WDS Settings

When selected in the Basic Settings page and enabled here, Wireless Distribution System (WDS) enables the router to be used as a wireless bridge. Two Wireless-G Routers in bridge mode can communicate with each other through their wireless interfaces. To accomplish this, all wireless routers should be set to the same channel and the MAC address of other AP / Routers should be entered in the table.

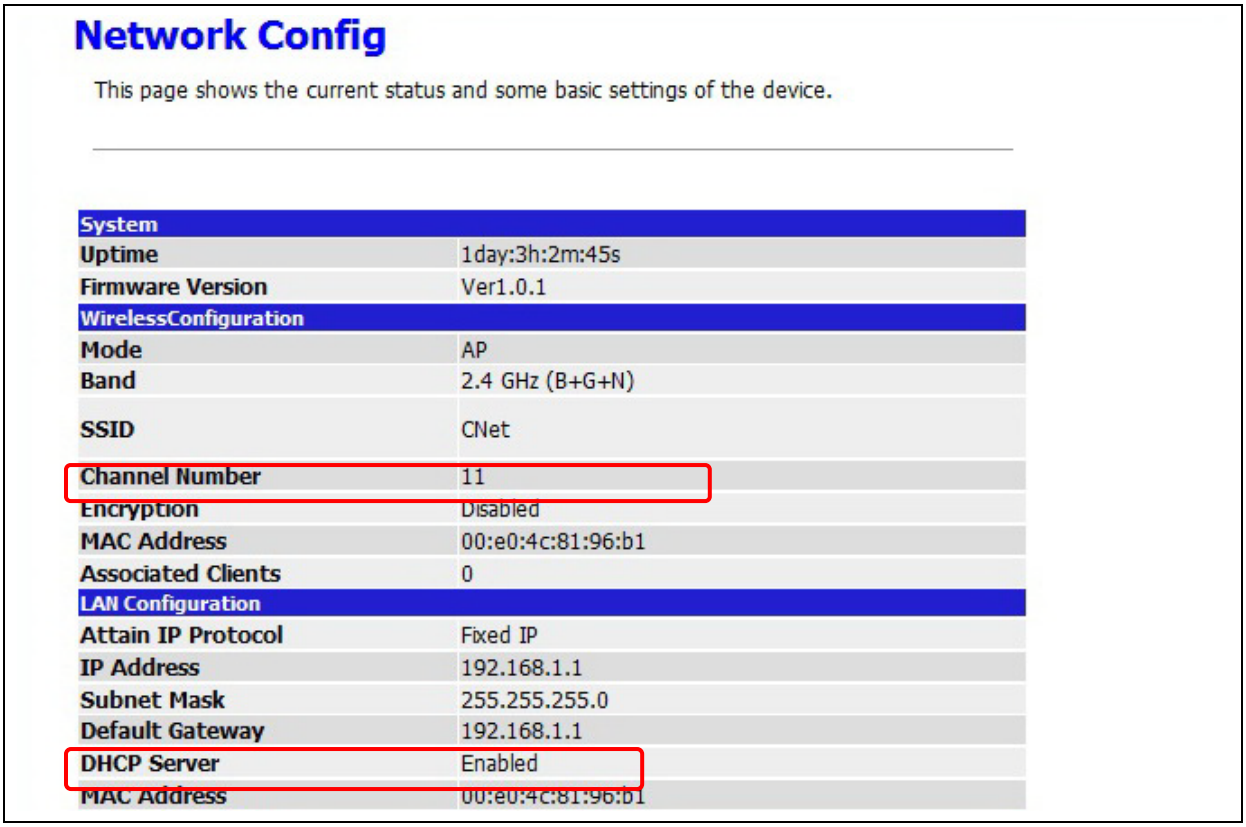

WDS Settings
Wireless Distribution System uses wireless media to communicate with other APs, like the Ethernet does. To do this, you must set these APs in the same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS.
Enable WDS
MAC Address:
Data Rate:
Auto
Comment:
Apply Changes
Reset
Set Security
Show Statistics
Current WDS AP List:
MAC Address
Tx Rate (Mbps)
Comment
Select
Delete Selected
Delete All
Reset

The WDS explanation as the following picture.

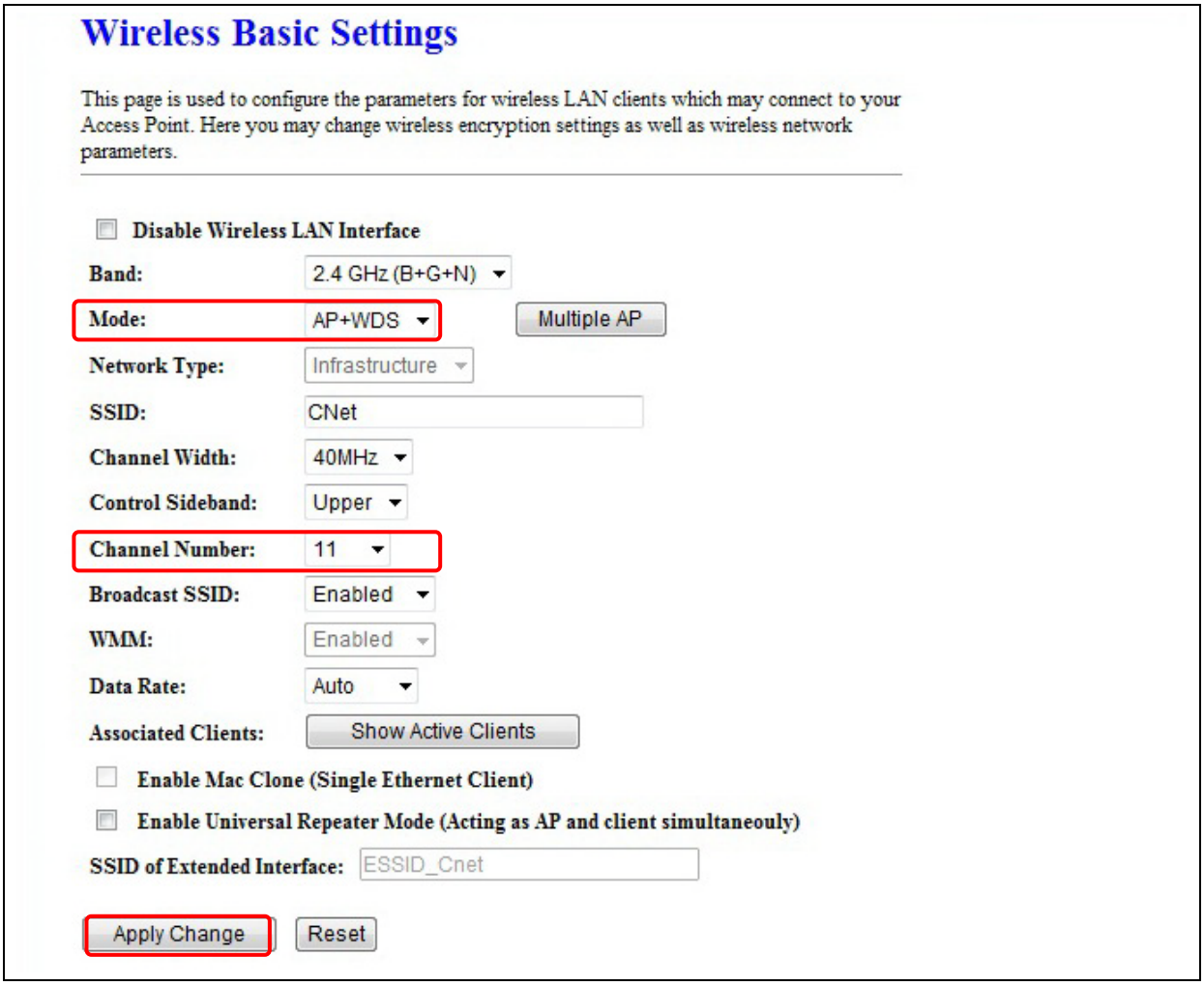


*Please follow the below instructions to setup the WDS connection.

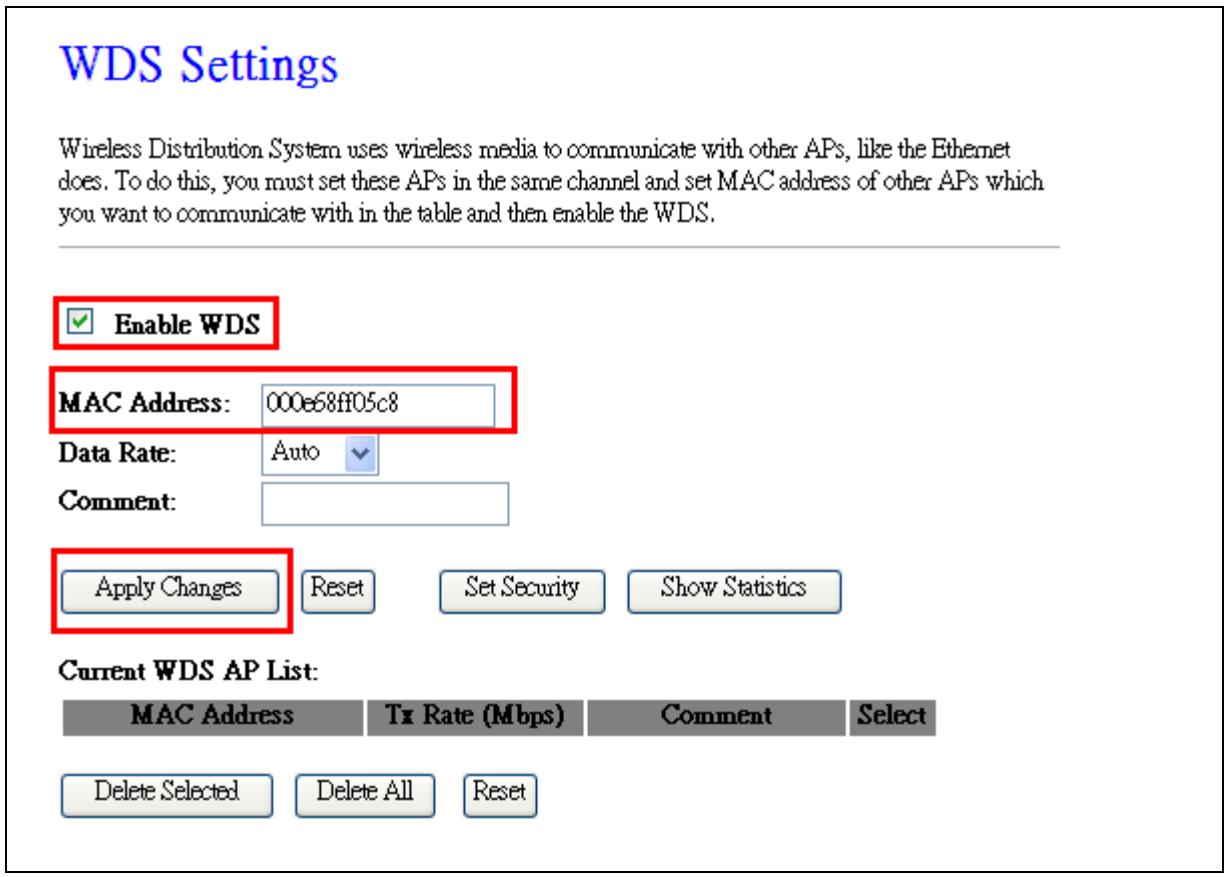
(1) Please check the MAC address and Channel number from the upper lever device.



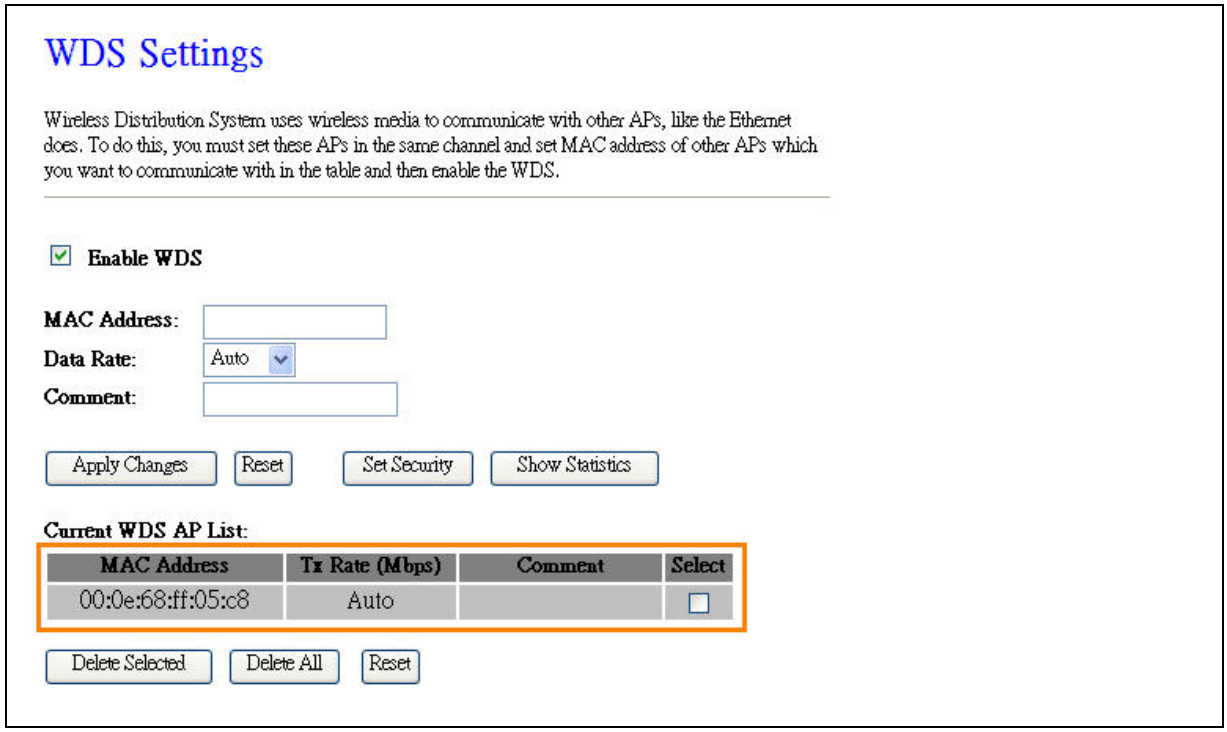
(2) Set the connection mode to “AP+WDS” from “Wireless Basic Setting”, and then select the channel number(in this example is “11”). Click **Apply Changes** to save the setting.



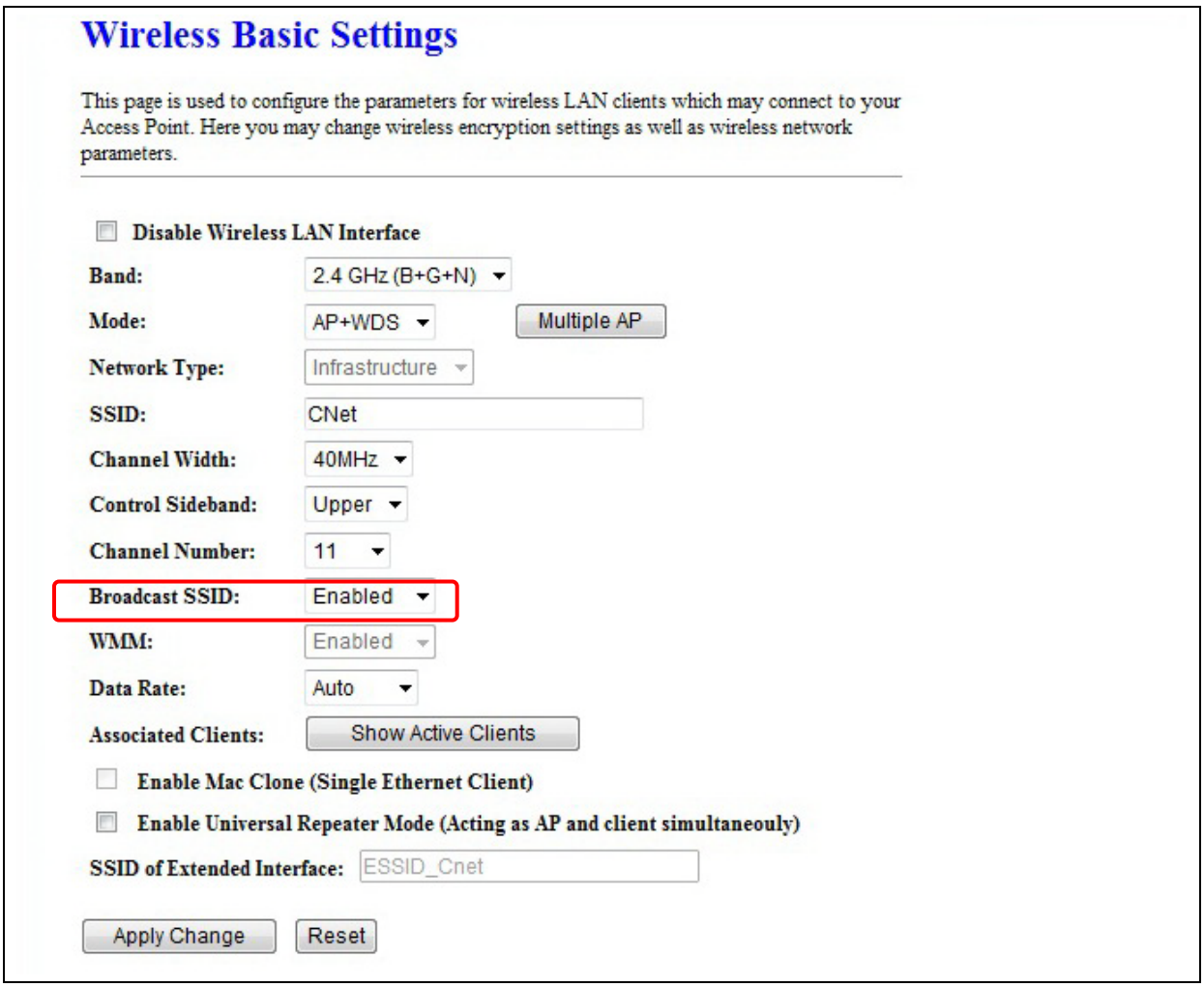
(3) Enable WDS function from the page – “WDS Setting”, and then fill in the upper level device MAC address. Click **Apply Changes** to save the setting data.


WDS Settings
Wireless Distribution System uses wireless media to communicate with other APs, like the Ethernet does. To do this, you must set these APs in the same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS.
Enable WDS
MAC Address: 000e68ff05c8
Data Rate: Auto
Comment:
Apply Changes
Reset
Set Security
Show Statistics
Current WDS AP List:
MAC Address
Tx Rate (Mbps)
Comment
Select
Delete Selected
Delete All
Reset

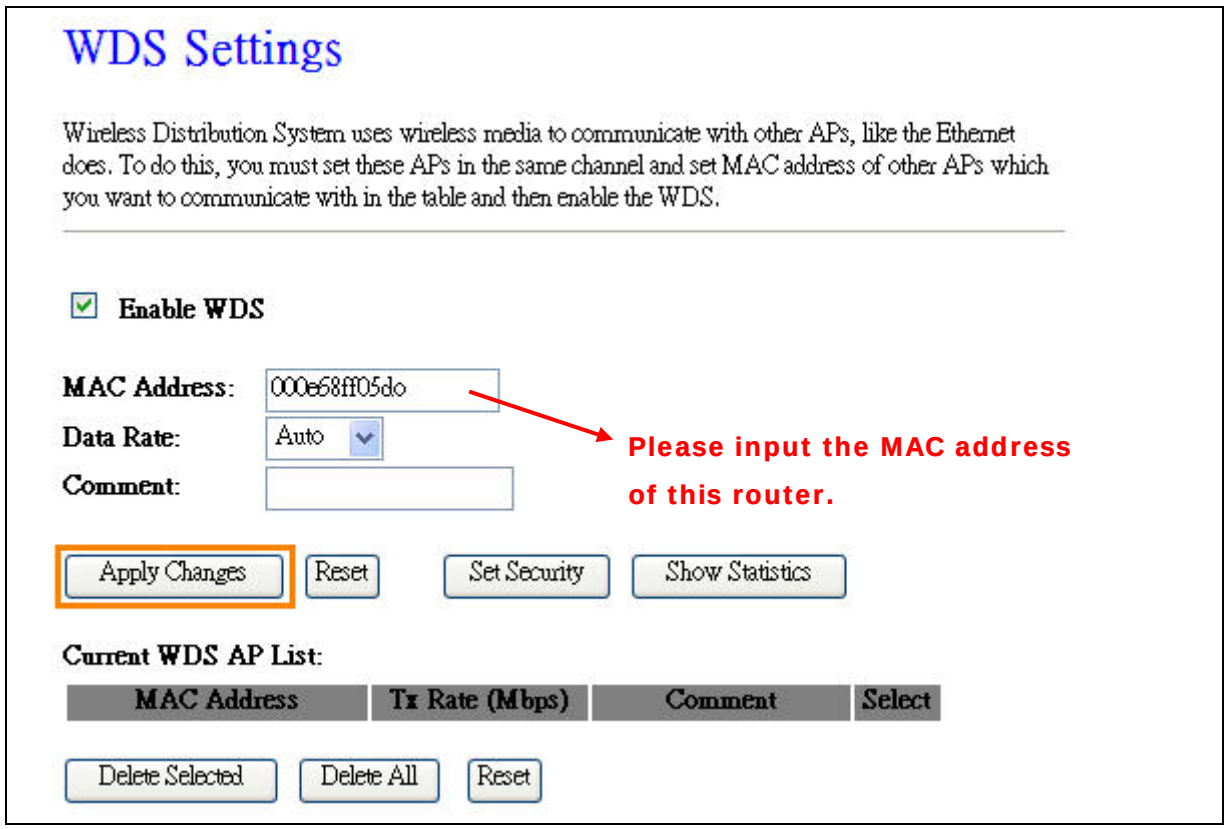
(4) The WDS AP List will show the WDS device MAC address after reboot.


WDS Settings
Wireless Distribution System uses wireless media to communicate with other APs, like the Ethernet does. To do this, you must set these APs in the same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS.
Enable WDS
MAC Address:
Data Rate: Auto
Comment:
Apply Changes
Reset
Set Security
Show Statistics
Current WDS AP List:
MAC Address
Tx Rate (Mbps)
Comment
Select
00:0e:68:ff:05:c8
Auto
Delete Selected
Delete All
Reset

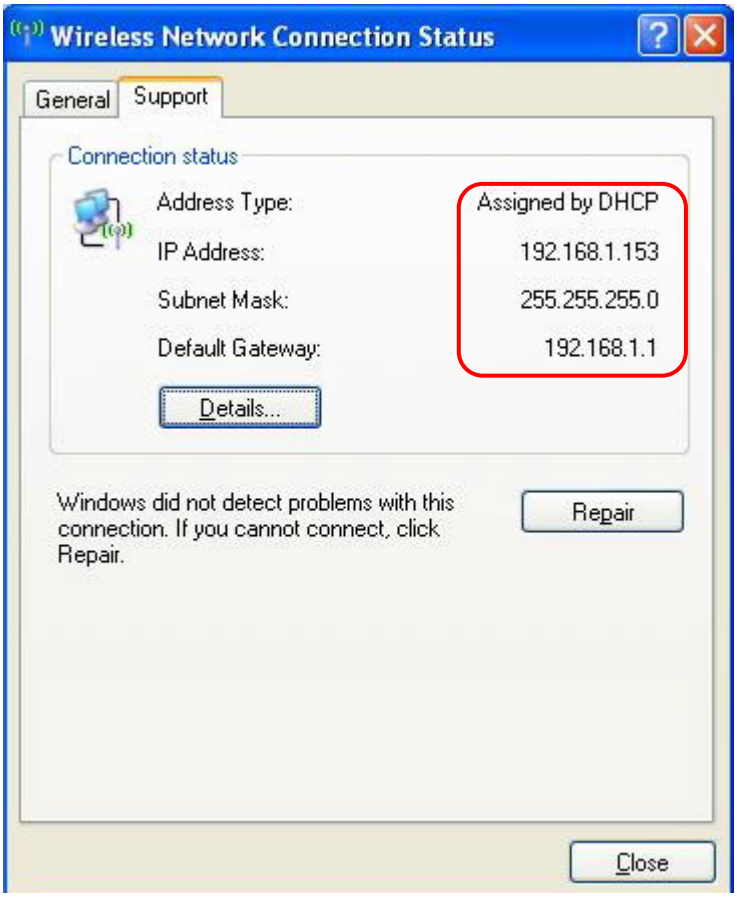
(5) Set “Broadcast SSID” to disable from page “Wireless Basic Setting”.



(6) Go to the upper level device WDS setting page and fill in the MAC address


WDS Settings
Wireless Distribution System uses wireless media to communicate with other APs, like the Ethernet does. To do this, you must set these APs in the same channel and set MAC address of other APs which you want to communicate with in the table and then enable the WDS.
Enable WDS
MAC Address: 000e68ff05do
Data Rate: Auto
Comment:
Please input the MAC address of this router.
Apply Changes
Reset
Set Security
Show Statistics
Current WDS AP List:
MAC Address
Tx Rate (Mbps)
Comment
Select
Delete Selected
Delete All
Reset

(7) You will receive an IP address from the upper lever device.



5.2.6 WPS

This page allows user to change the setting for WPS (Wi-Fi Protected Setup). Using this feature could let your wireless client atomically synchronize it's setting and connect to the Access Point in a minute without any hassle. CWR-854 could support both Self-PIN or PBC modes, or use the WPS button (at real panel) to easy enable the WPS function.

PIN model, in which a PIN has to be taken either from a sticker label or from the web interface of the WPS device. This PIN will then be entered in the AP or client WPS device to connect.

PBC model, in which the user simply has to push a button, either an actual or a virtual one, on both WPS devices to connect.

Please find the WPS button from the following illustrate

When users select a specific model on wireless base station, the clients can connect to the base by selecting the same model.

The connection procedures of PIN and PBC are almost the same. The small difference between those two is:

Users input the PIN of wireless card in the base station first; it will limit the range of the clients. It is faster to establish a connection on PIN model.

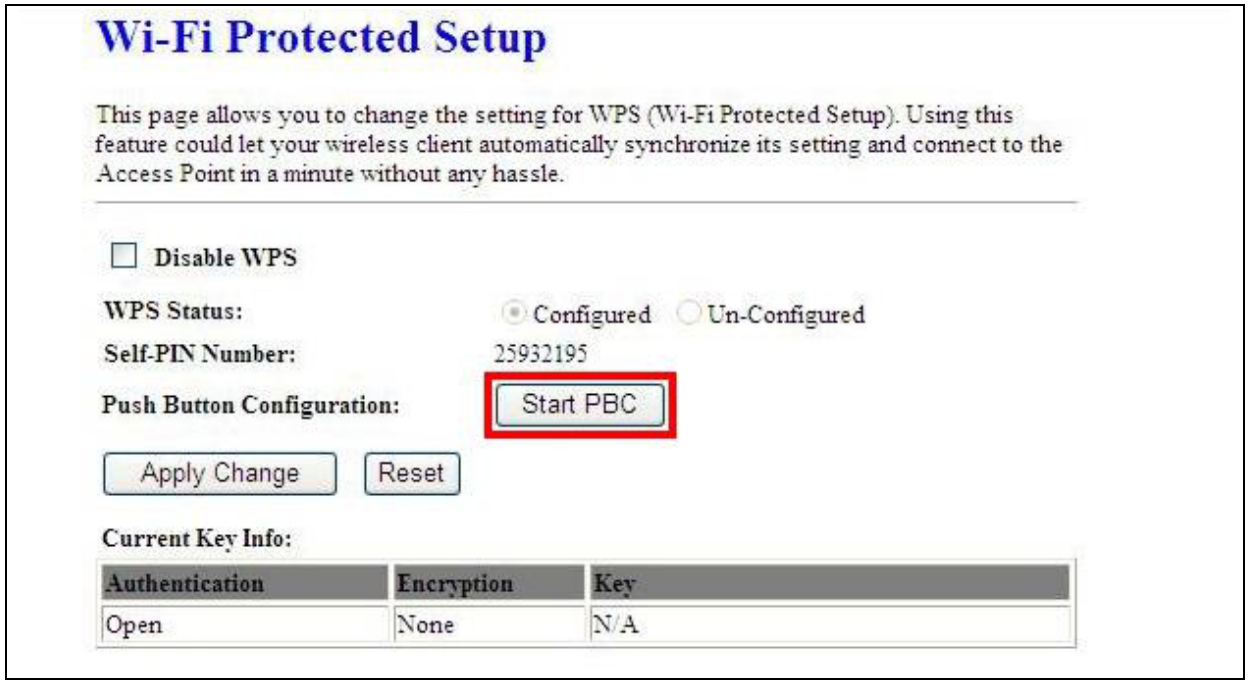
On PBC model, users push the WPS button to activate the function, and then the wireless client must push the WPS button in 2 mins to enter the network. The client will search to see if there is any wireless base station which supports WPS is activating. If the client finds a matching base, the connection will be established. The speed of establishing a connection is slower than the PIN model because of this extra step.

On the other hand, users need to input the information of the wireless card into the register interface. It might lead to the failure of connection, if users make mistakes on inputting. On PBC model, users only need to click the WPS button on both sides to make a connection. It is easier to operate.

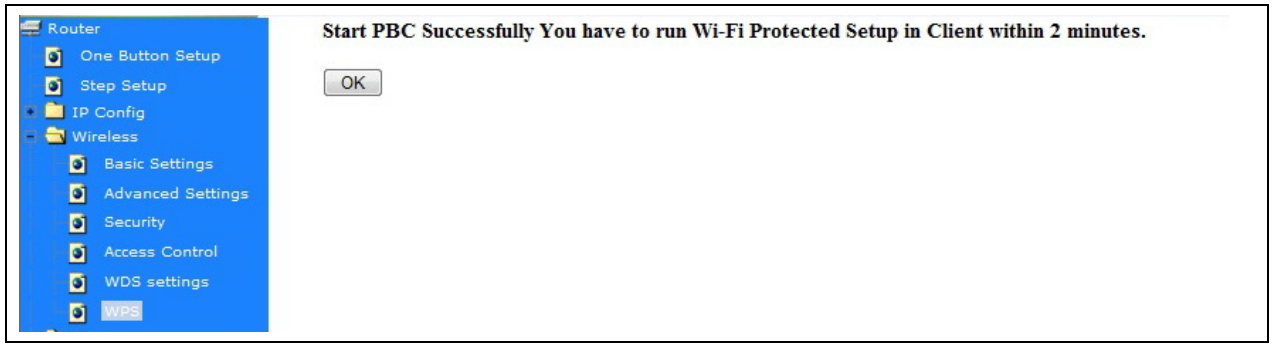
This page supports **Start PBC** and **Start PIN**; please read the following instructions

* Start PBC:

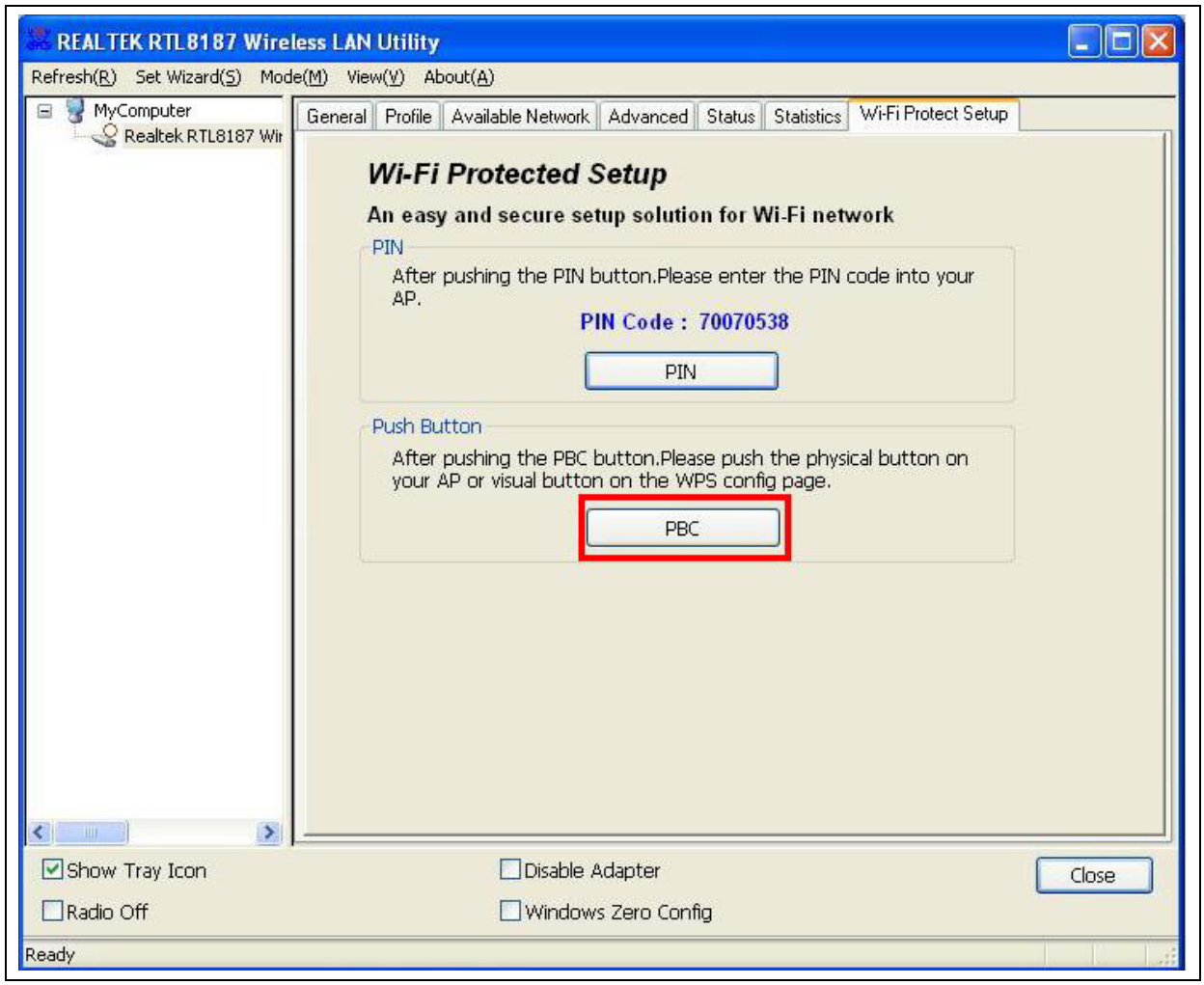
(1) Click **Start PBC** to connect to the wireless network card.



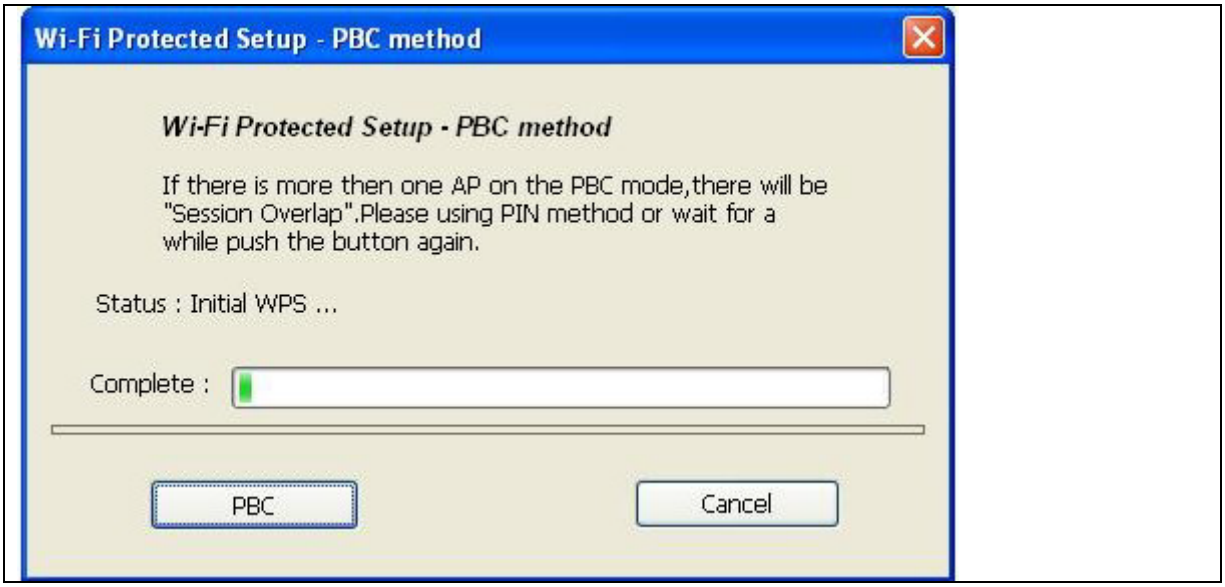
(2) Click **OK** to start WPS process.



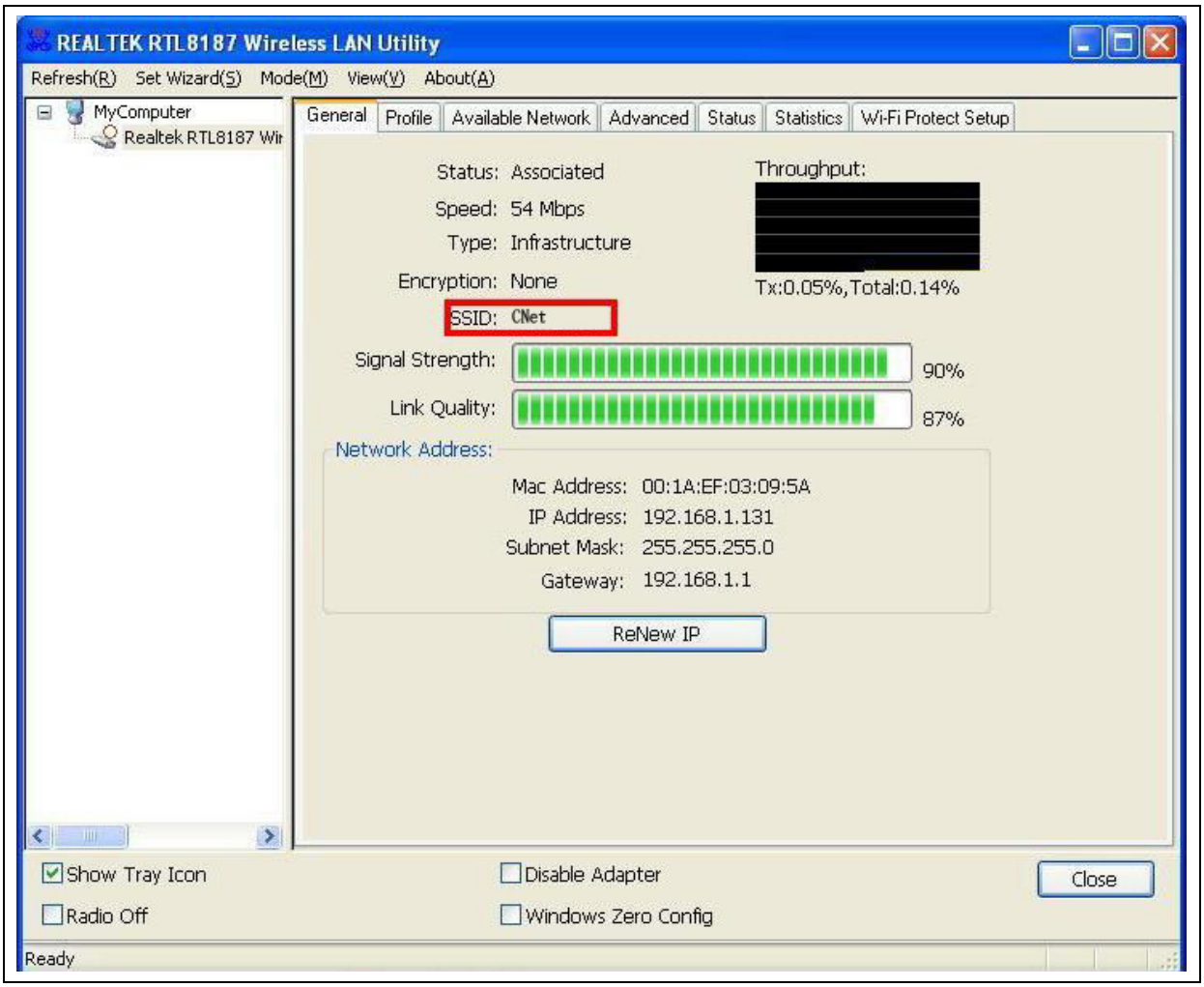
(3) Open the configuration page of the wireless card. Click the **Wi-Fi Protect Setup**, and then click **PBC** to start the WPS process.



(4) The WPS is being processed.

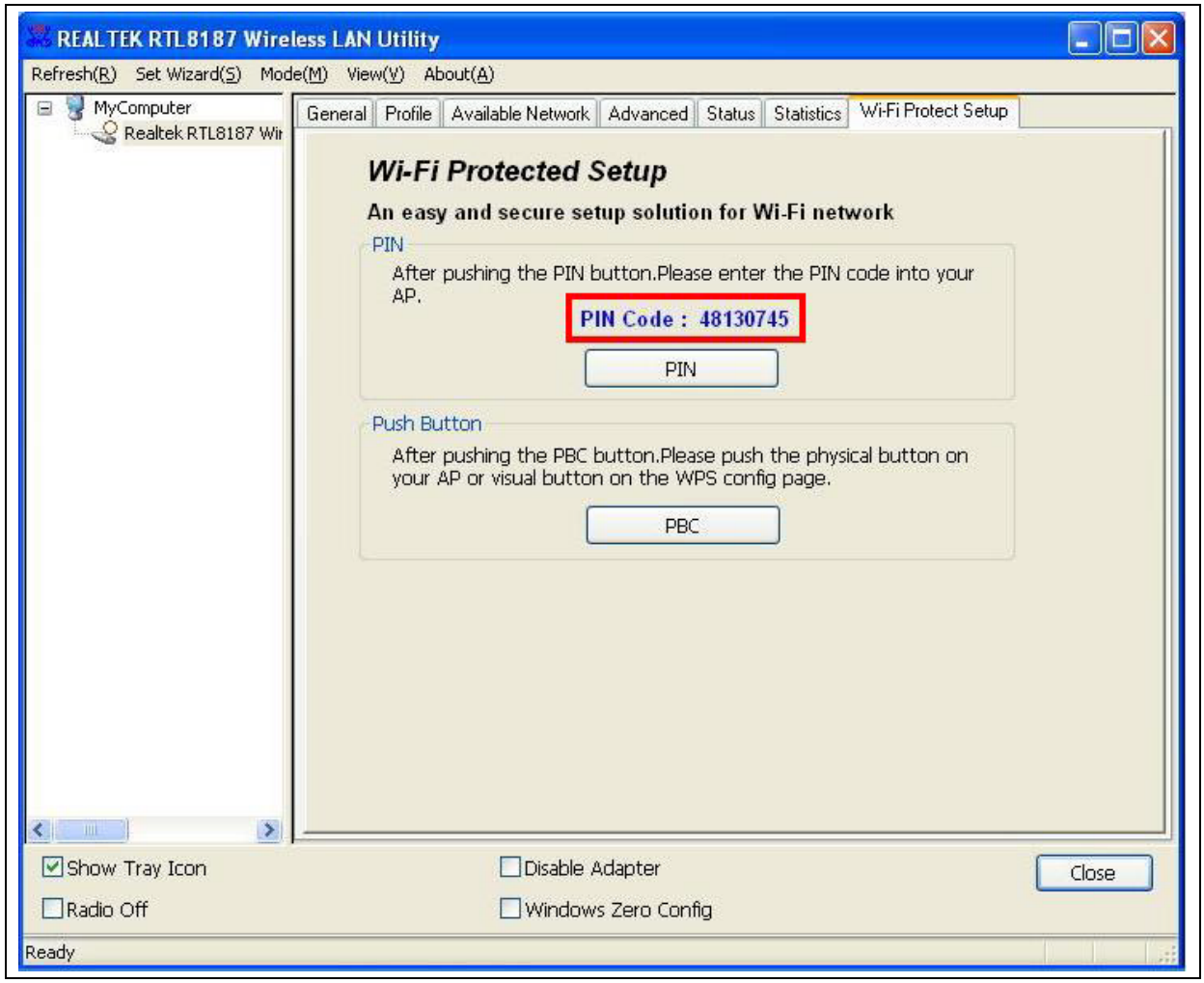

Wi-Fi Protected Setup - PBC method
Wi-Fi Protected Setup - PBC method
If there is more then one AP on the PBC mode,there will be "Session Overlap".Please using PIN method or wait for a while push the button again.
Status : Initial WPS ...
Complete :
PBC
Cancel

(5) The USB dongle will receive the connection information from wireless router if the dongle has connected to the wireless router successfully.

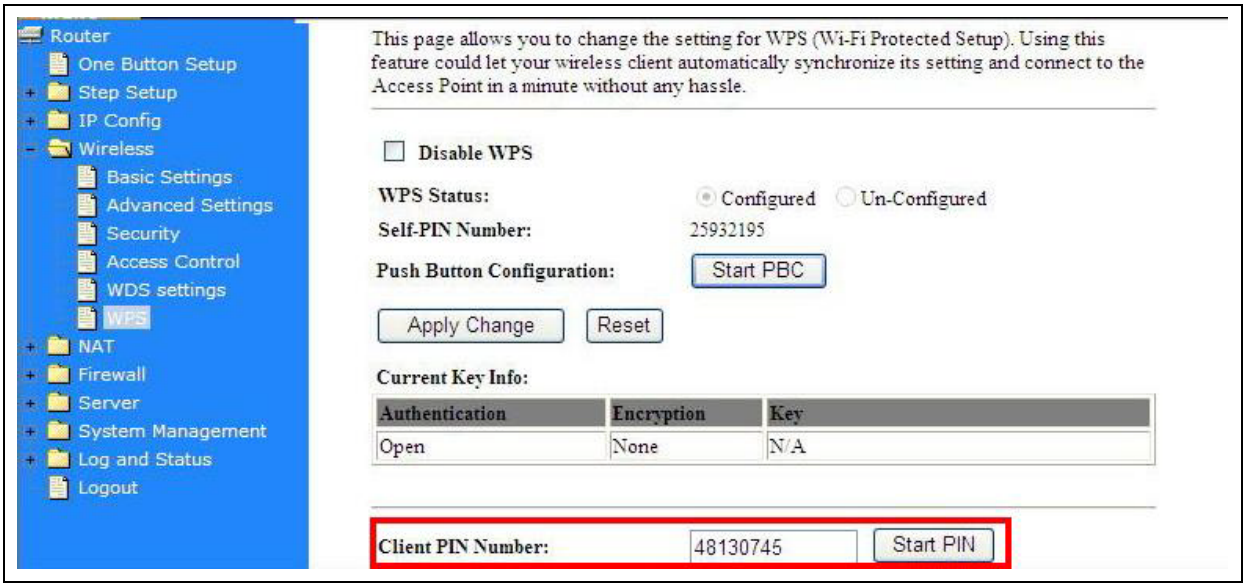


* Start PIN:

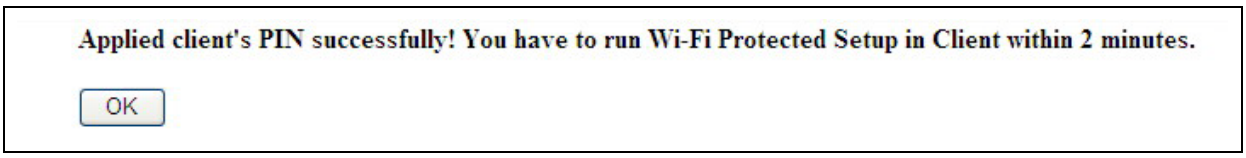
(1.) Get the WPS PIN number from wireless card and write it down.


REALTEK RTL8187 Wireless LAN Utility
Refresh(R) Set Wizard(S) Mode(M) View(V) About(A)
MyComputer
Realtek RTL8187 Wir
General Profile Available Network Advanced Status Statistics Wi-Fi Protect Setup
Wi-Fi Protected Setup
An easy and secure setup solution for Wi-Fi network
PIN
After pushing the PIN button.Please enter the PIN code into your AP.
PIN Code : 48130745
PIN
Push Button
After pushing the PBC button.Please push the physical button on your AP or visual button on the WPS config page.
PBC
Show Tray Icon
Disable Adapter
Close
Radio Off
Windows Zero Config
Ready

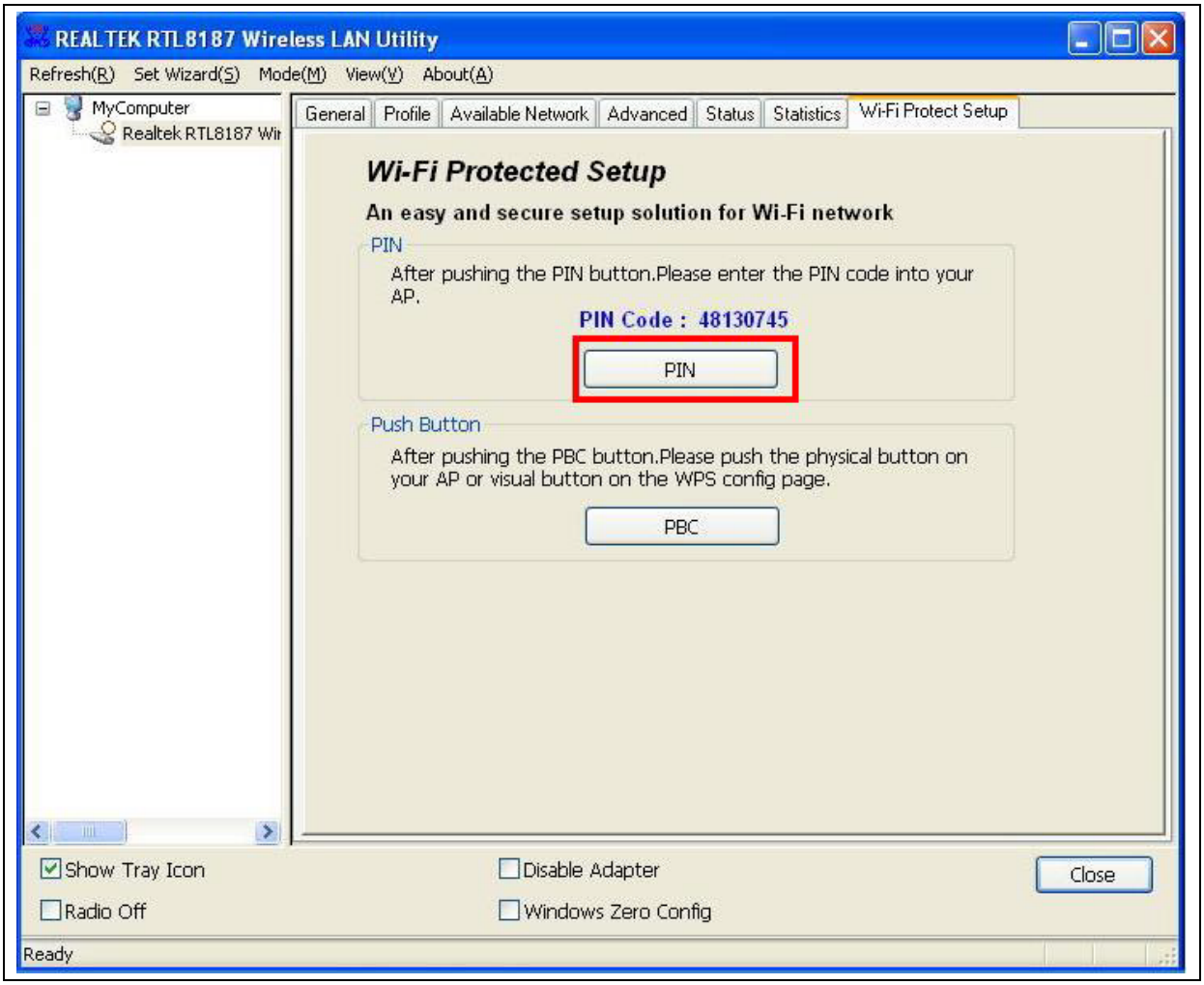
(2) Fill in the PIN number which from the wireless card in CBR-980, and then click “Start PIN”.



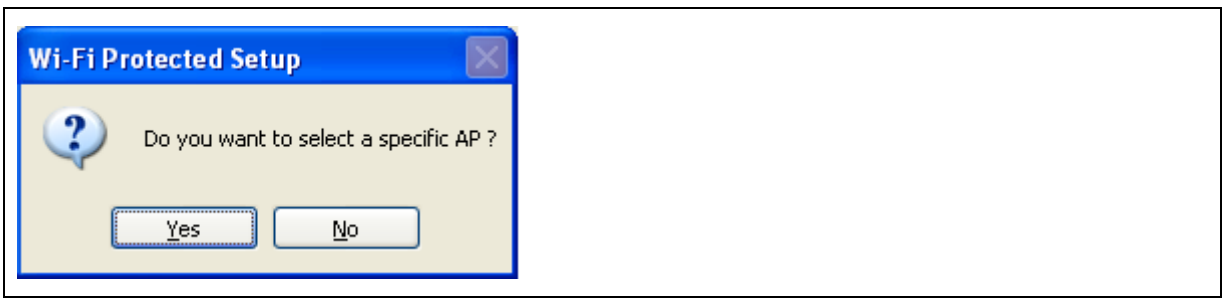
(3) Click **OK** to starts process.



(4) Click **PIN** to start the WPS process with the wireless router.


REALTEK RTL8187 Wireless LAN Utility
Refresh(R) Set Wizard(S) Mode(M) View(V) About(A)
MyComputer
Realtek RTL8187 Wir
General Profile Available Network Advanced Status Statistics Wi-Fi Protect Setup
Wi-Fi Protected Setup
An easy and secure setup solution for Wi-Fi network
PIN
After pushing the PIN button.Please enter the PIN code into your AP.
PIN Code : 48130745
PIN
Push Button
After pushing the PBC button.Please push the physical button on your AP or visual button on the WPS config page.
PBC
Show Tray Icon
Disable Adapter
Close
Radio Off
Windows Zero Config
Ready

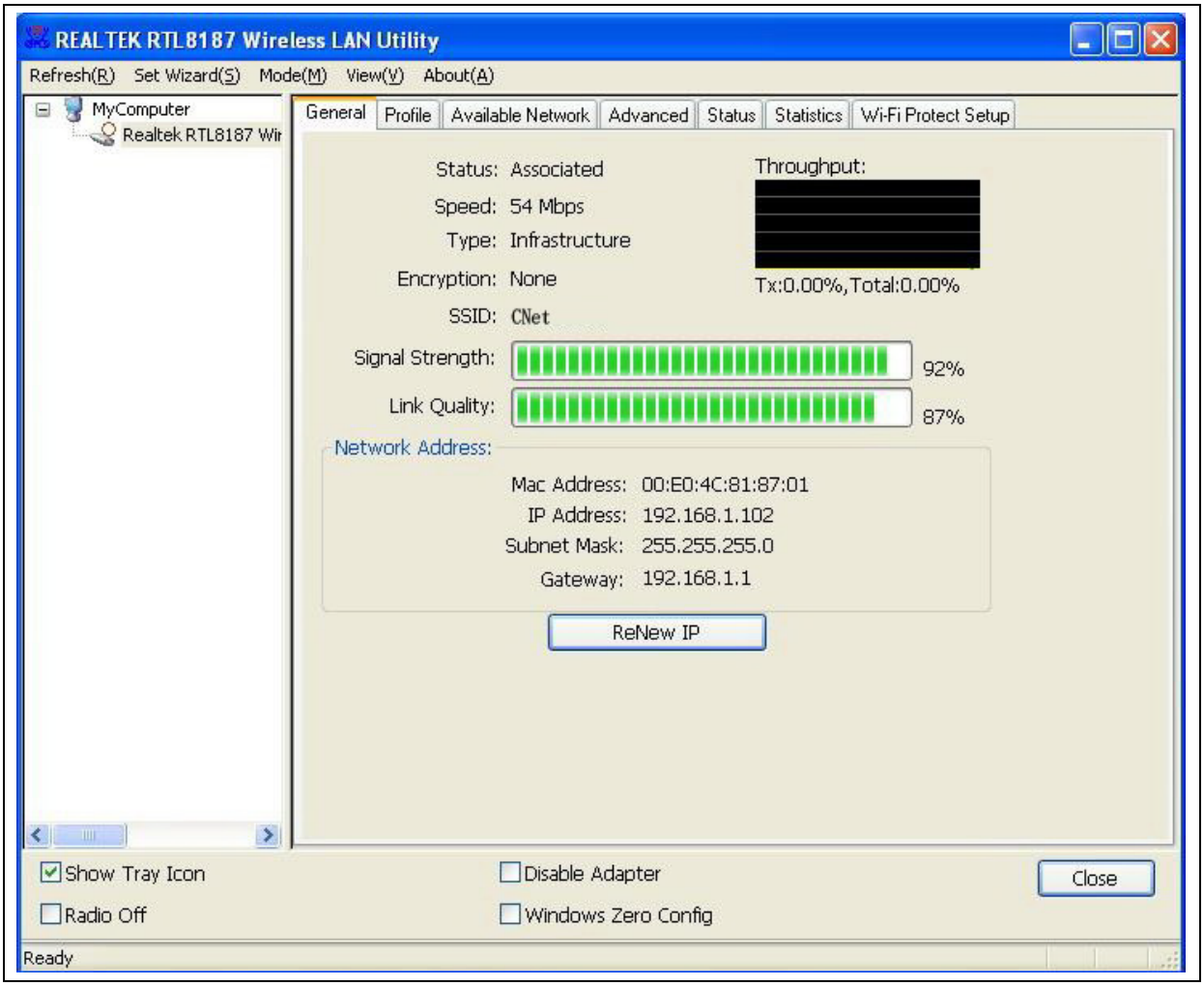
(5) Click **No,** then USB Dongle will select AP automatically.



(6) WPS is in processing.

Wi-Fi Protected Setup - PIN method
Wi-Fi Protected Setup - PIN method
Please enter the following PIN code into your AP .
PIN Code : 48130745
Status : Initial WPS ...
Cancel

(7) The following page shows the wireless card has already connected to the wireless router.



5.3 NAT

5.3.1 Visual Server

The Virtual Server feature allows users to create Virtual Servers by re-directing a particular range of service port numbers (from the WAN port) to a particular LAN IP address.

Port Forwarding
Entries in this table allow you to automatically redirect common network services to a specific machine behind the NAT firewall. These settings are only necessary if you wish to host some sort of server like a web server or mail server on the private local network behind your Gateway's NAT firewall.
Enable Port Forwarding
Address :
Protocol:
Both
Public Port Range:
Private Port:
Comment:
Apply Change
Reset
Current Port Forwarding Table:
Local IP Address
Protocol
Public Port Range
Private Port
Comment
Select
Delete Selected
Delete All
Reset

Item	Description
Enable Port Forwarding	Select to enable Port Forwarding service or not.
IP Address	Specify the IP address which receives the incoming packets.
Protocol	Select the protocol type.
Port Range	Enter the port number, for example 80-80 or 20-22
Comment	Add comments for this port forwarding rule.
Apply Change & Reset	Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.
Current Port Forwarding Table	It will display all port forwarding regulation you made.
Delete Selected & Delete All	Click **Delete Selected** will delete the selected item. Click **Delete All** will delete all items in this table.
Reset	Click **Reset** to cancel.

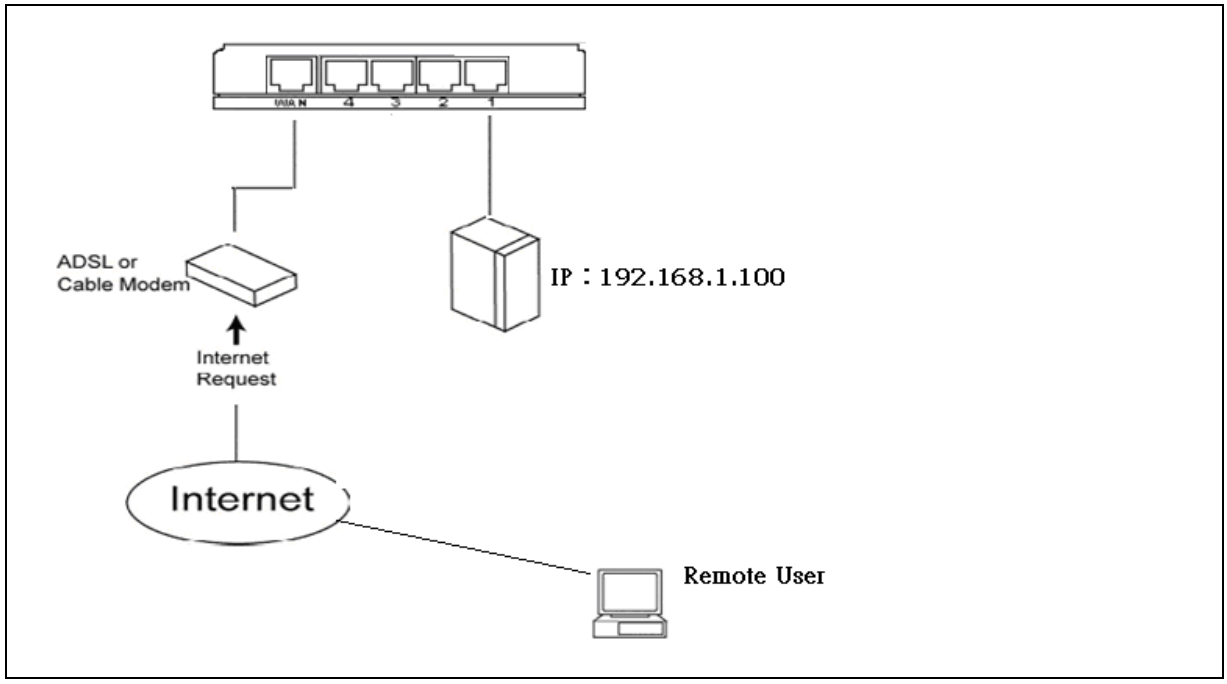
*Please find the following figure to know that what the virtual server is. The web server is located on 192.168.1.100, forwarding port is 80, and type is TCP+UDP.

Configuration:

Private IP: 192.168.1.100

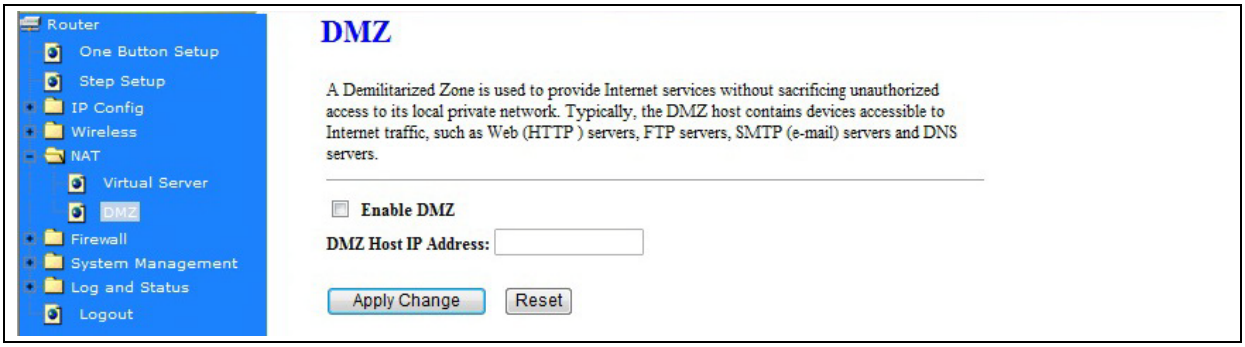
Port: 80 - 80

Type: TCP+UDP



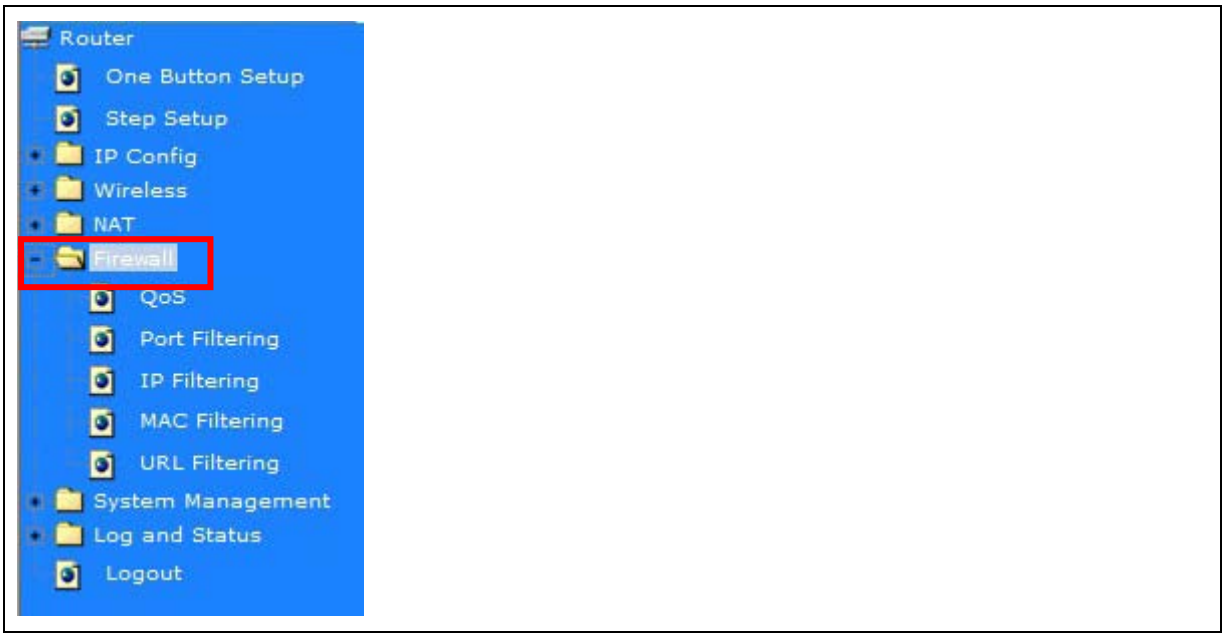
5.3.2 DMZ

The DMZ feature allows one local user to be exposed to the Internet for special-purpose applications like Internet gaming or videoconferencing. When enabled, this feature opens all ports to a single station and hence renders that system exposed to intrusion from outside. The port forwarding feature is more secure because it only opens the ports required by that application.


Router
One Button Setup
Step Setup
IP Config
Wireless
NAT
Virtual Server
DMZ
Firewall
System Management
Log and Status
Logout
DMZ
A Demilitarized Zone is used to provide Internet services without sacrificing unauthorized access to its local private network. Typically, the DMZ host contains devices accessible to Internet traffic, such as Web (HTTP) servers, FTP servers, SMTP (e-mail) servers and DNS servers.
Enable DMZ
DMZ Host IP Address:
Apply Change
Reset

Item	Description
Enable DMZ	It will enable the DMZ service if you select it.
DMZ Host IP Address	Please enter the specific IP address for DMZ host.
Apply Change & Reset	Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.

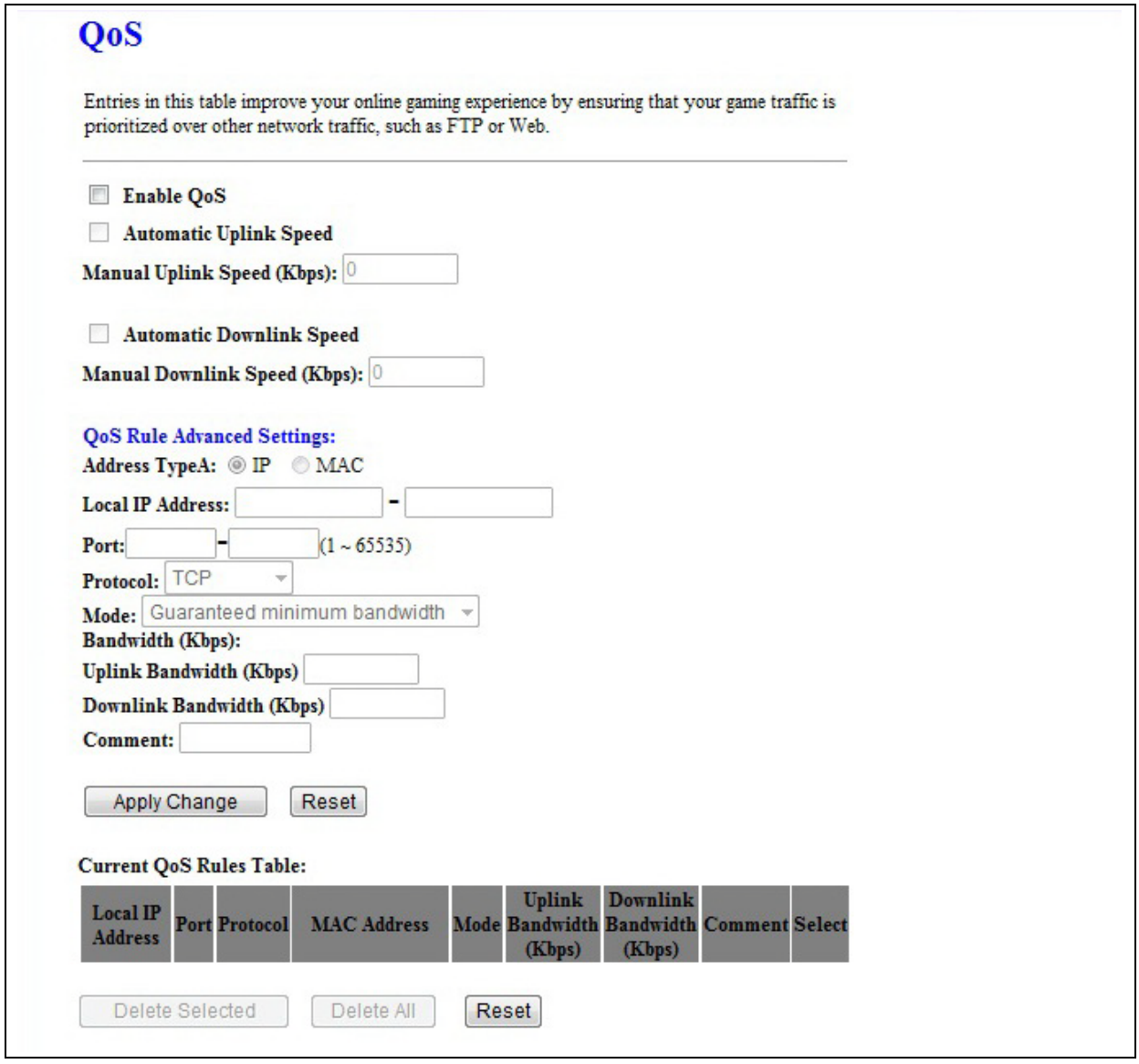
5.4 Firewall



5.4.1 QoS

Quality of Service (QoS) refers to the capability of a network to provide better service to selected network traffic over various technologies, including Frame Relay, Asynchronous Transfer Mode (ATM), Ethernet and 802.1x networks, and IP-routed networks that may use any or all of these underlying

technologies. The primary goal of QoS is to provide priority including dedicated bandwidth, controlled jitter and latency (required by some real-time and interactive traffic), and improved loss characteristics. Also important is making sure that providing priority for one or more flows does not make other flows fail. QoS technologies provide the elemental building blocks that will be used for future business applications in campus, WAN and service provider networks. This chapter provides each setting of QoS.

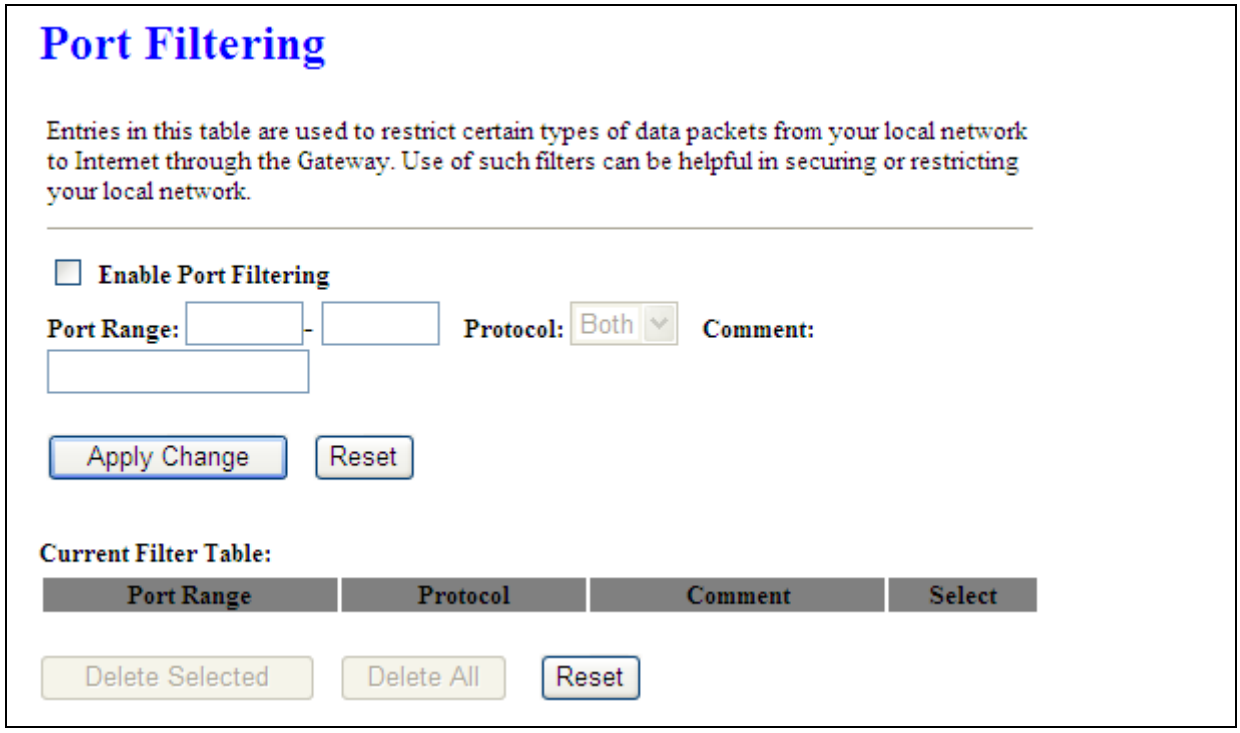


Item	Description
Enable QoS	One checkbox appears to activate the QoS control function or not. Click it to force the router to perform QoS control over traffic flows.
Automatic Uplink Speed	Click the checkbox to manage uplink speed automatically.
Manual Uplink Speed	Input the number of uplink speed

Automatic Downlink Speed	Click the checkbox to manage downlink speed automatically.
Manual Downlink Speed	Input the number of downlink speed.
Address TypeA	Select IP or MAC to manage QoS.
Mode	Select the type of bandwidth mode.
Uplink Bandwidth	Please enter the port number of uplink bandwidth.
Downlink Bandwidth	Please enter the port number of downlink bandwidth.
Comment	You can add comments for this regulation.
Apply Changes	Click on Apply Changes to save the setting or Reset to clear all the input data.

5.4.2 Port Filtering

When enabled packets are denied access to Internet/filtered based on their port address.

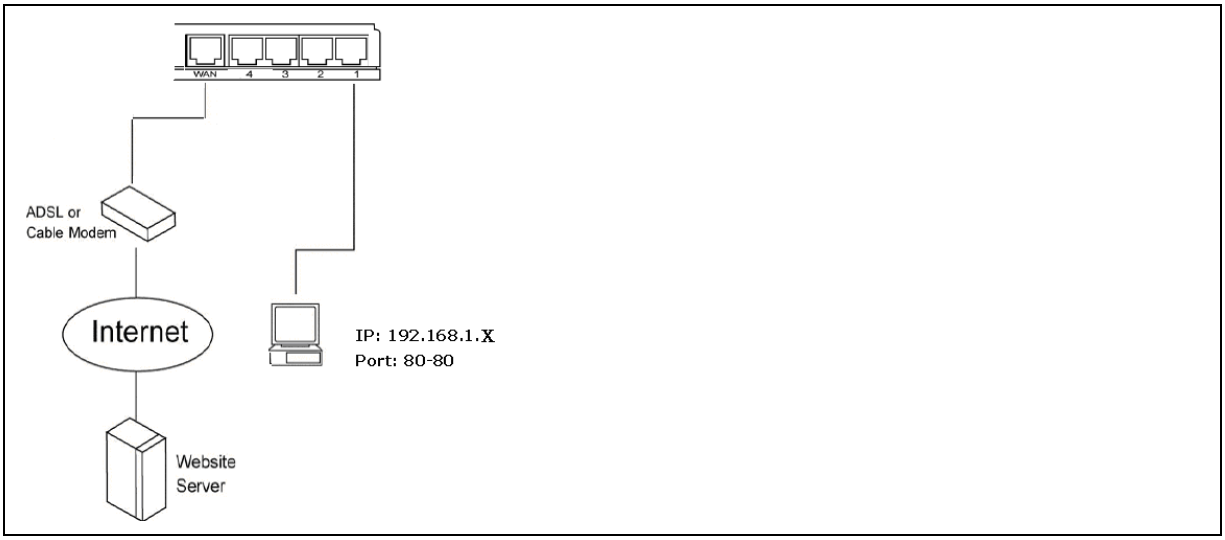


Item	Description
Enable Port Filtering	Please select **Enable Port Filtering** to filter ports.
Port Range	Please enter the port number that needs to be filtered.
Protocol	Please select the protocol type of the port.
Comment	You can add comments for this regulation.
Apply Change & Reset	Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.
Current Filter Table	It will display all ports that are filtering now.
Delete Selected & Delete All	Click **Delete Selected** will delete the selected item. Click **Delete All** will delete all items in this table.
Rest	You can click **Reset** to cancel.

* Port 80 has been blocked as the following illustrate.

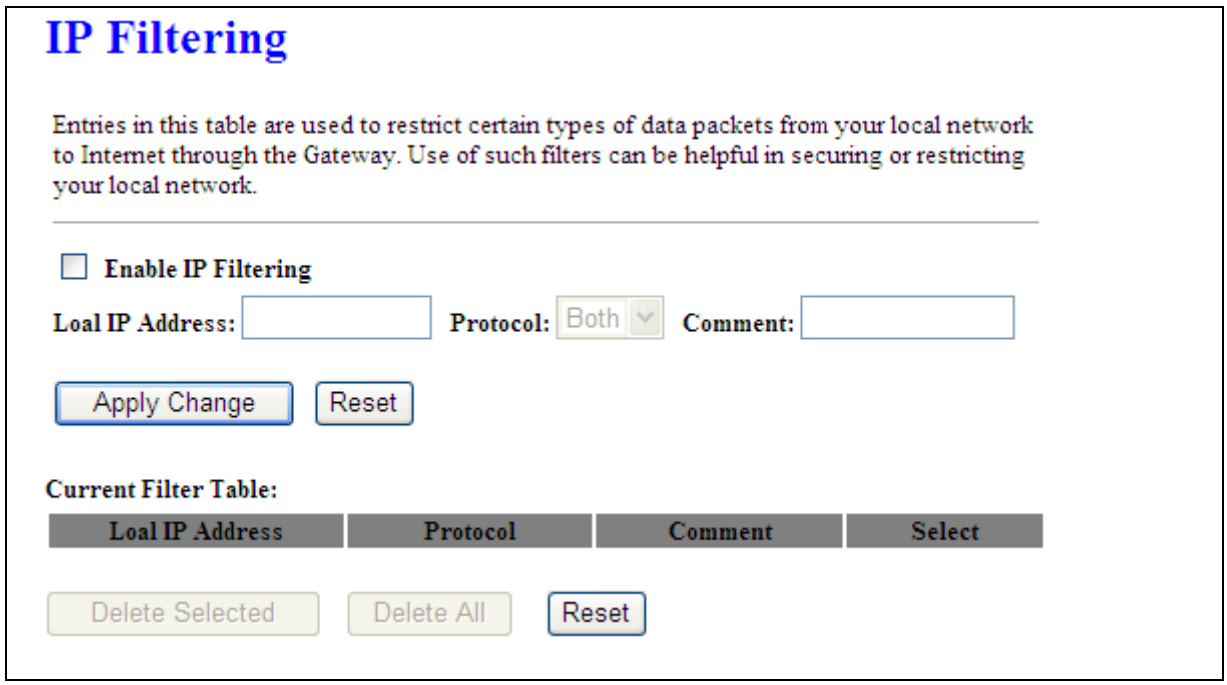
IP: 192.168.1.X

Port: 80-80



5.4.3 IP Filtering

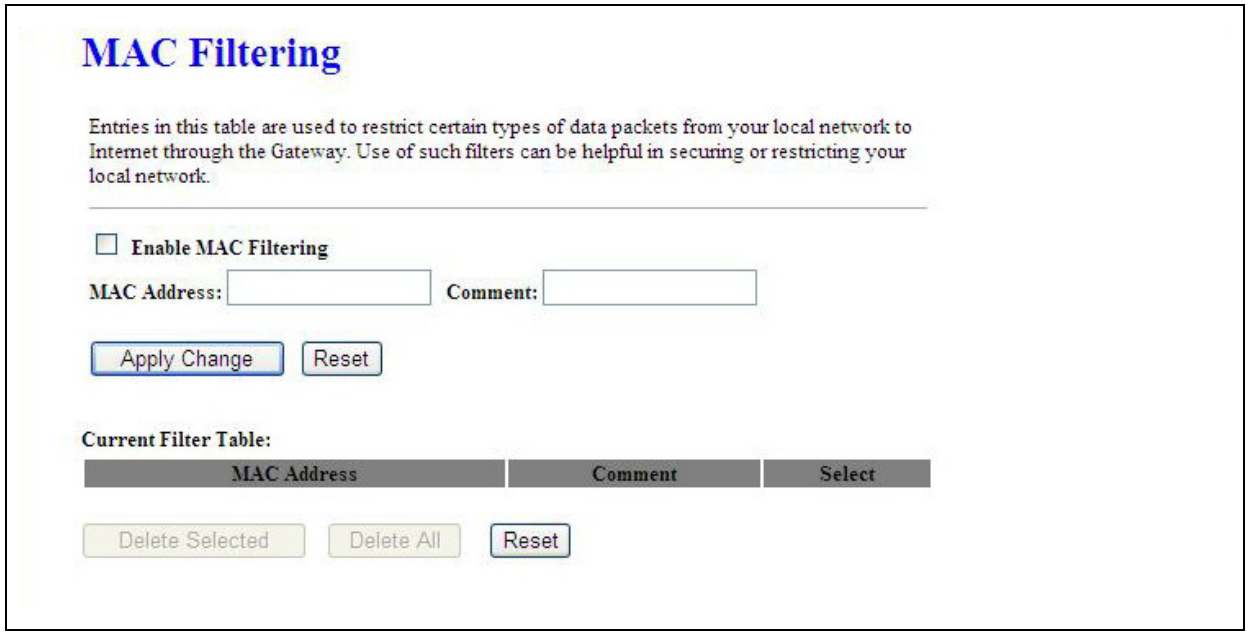
When enabled, LAN clients are blocked / filtered from accessing the Internet based on their IP addresses.



Item	Description
Enable IP Filtering	Please select **Enable IP Filtering** to filter IP addresses.
Local IP Address	Please enter the IP address that needs to be filtered.
Protocol	Please select the protocol type of the IP address.
Comment	You can add comments for this regulation.
Apply Change & Reset	Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.
Current Filter Table	It will display all ports that are filtering now.
Delete Selected & Delete All	Click **Delete Selected** will delete the selected item. Click **Delete All** will delete all items in this table.
Rest	You can click **Reset** to cancel.

5.4.4 MAC Filtering

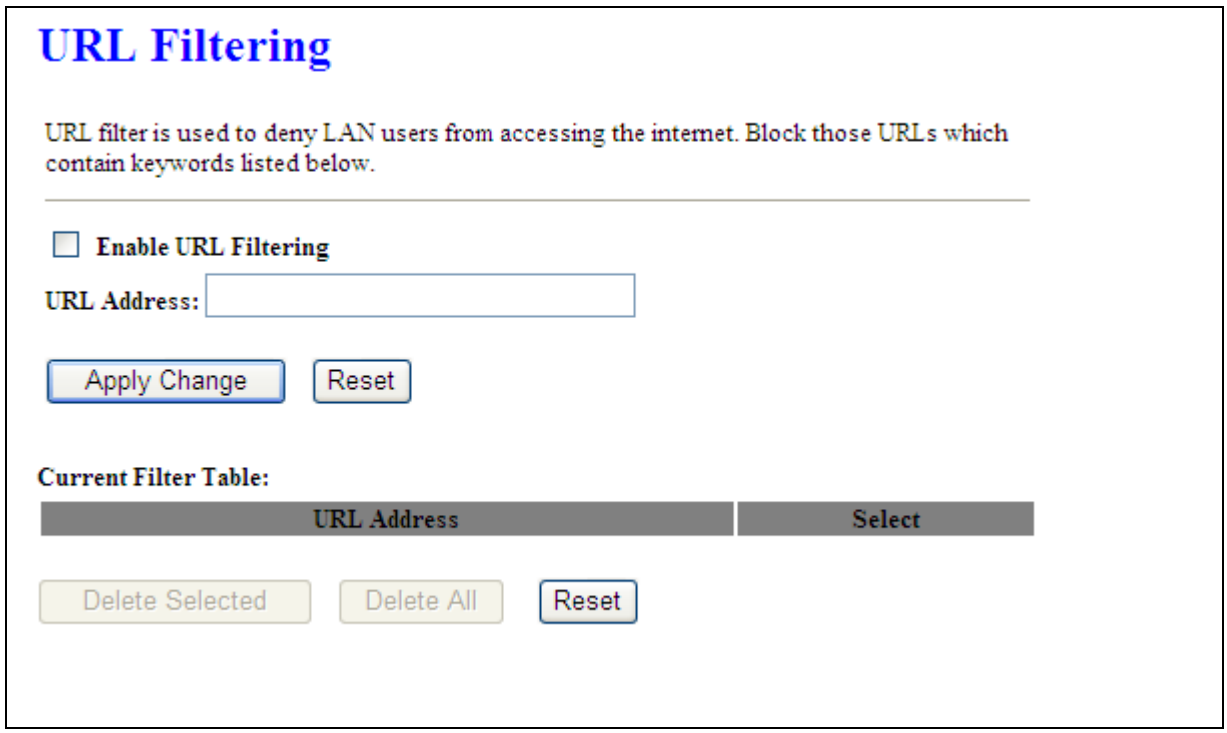
When enabled, filtering will be based on the MAC address of LAN computers. Any computer with its MAC address on this list will be blocked from accessing the Internet.


MAC Filtering
Entries in this table are used to restrict certain types of data packets from your local network to Internet through the Gateway. Use of such filters can be helpful in securing or restricting your local network.
Enable MAC Filtering
MAC Address:
Comment:
Apply Change
Reset
Current Filter Table:
MAC Address
Comment
Select
Delete Selected
Delete All
Reset

Item	Description
Enable MAC Filtering	Please select **Enable MAC Filtering** to filter MAC addresses
MAC Address	Please enter the MAC address that needs to be filtered.
Comment	You can add comments for this regulation.
Apply Change & Reset	Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.
Current Filter Table	It will display all ports that are filtering now.
Delete Selected & Delete All	Click **Delete Selected** will delete the selected item. Click **Delete All** will delete all items in this table.
Rest	You can click **Reset** to cancel.

5.4.5 URL Filtering

URL Filtering is used to restrict users to access specific websites in internet



Item	Description
Enable URL Filtering	Please select **Enable MAC Filtering** to filter MAC addresses
URL Address	Please enter the MAC address that needs to be filtered.
Apply Change & Reset	Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.
Current Filter Table	It will display all ports that are filtering now.
Delete Selected & Delete All	Click **Delete Selected** will delete the selected item. Click **Delete All** will delete all items in this table.
Rest	You can click **Reset** to cancel.

Notes: This function will not be in effect when the Visual Server is enabled. Please disable Visual Server before activate the URL Filtering function.

5.5 System Management

It has 6 sections: Change Password, Firmware Upgrade, Profiles Save, Time Zone Setting, UPnP Setting, and Language Setting. It is easy and helpful for users making more detailed settings.

5.5.1 Change Password

Users can set or change the administrator's password in this section.

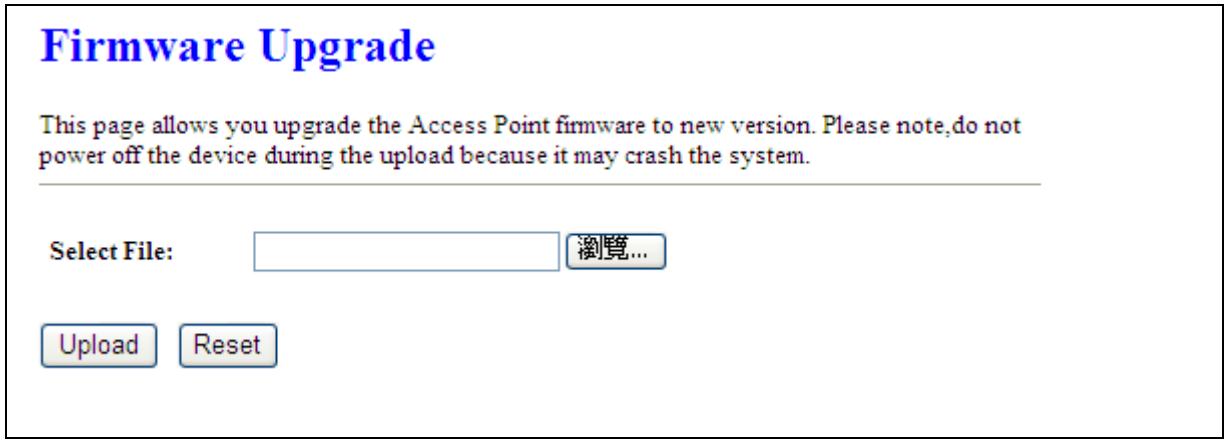
Change Password
This page is used to set the account to access the web server of Access Point. Empty user name and password will disable the protection.
User Name:
admin
New Password:
Please enter the password
Confirmed Password:
and confirm it.
Apply Change
Reset

Click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data.

5.5.2 Firmware Upgrade

The firmware on this wireless router can be easily upgraded. You can check the website (http://www.cnet.com.tw) to see if there is any later version of firmware

Notes: Do not power off the device while the firmware is being upgraded

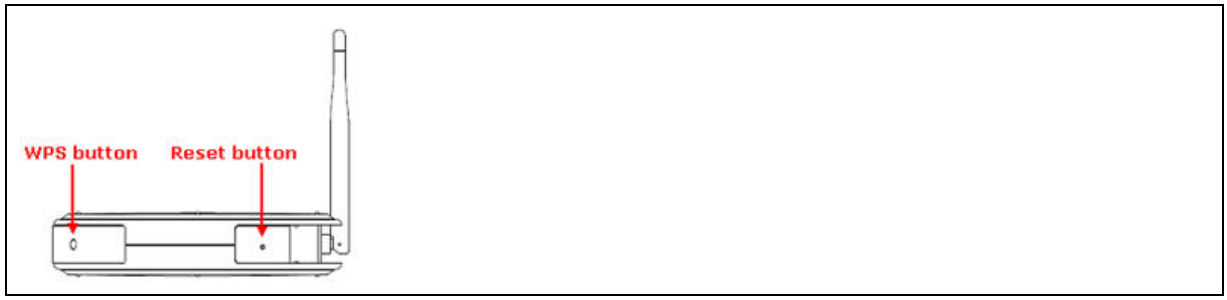

Firmware Upgrade
This page allows you upgrade the Access Point firmware to new version. Please note,do not power off the device during the upload because it may crash the system.
Select File:
瀏覽...
Upload
Reset

Caution: To prevent that firmware upgrading is interrupted by other wireless signals and causes failure. We recommend users to use wired connection during upgrading.

Caution: The firmware upgrade will not remove your previous settings.

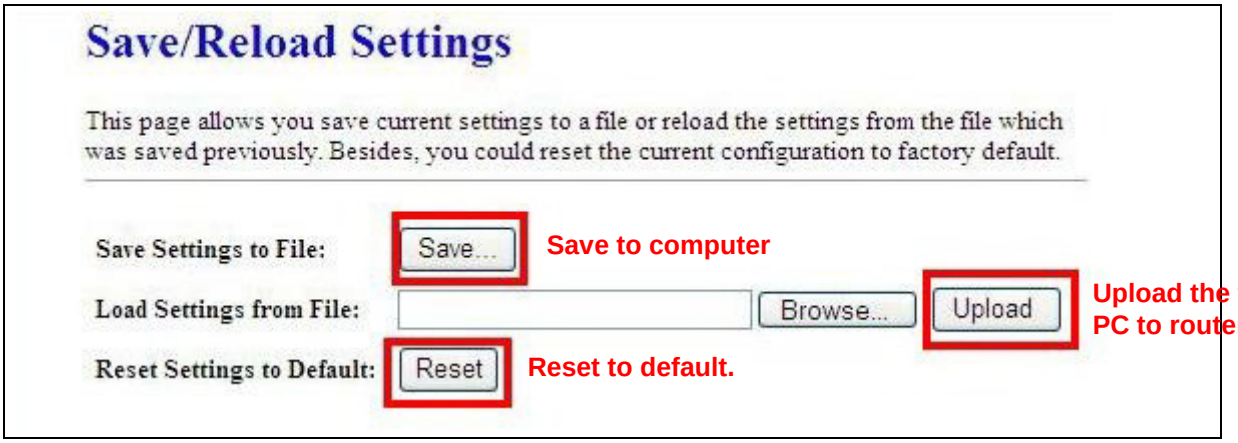
*Reset button:

On the back of this router, there is a reset button. If you can not login the administrator page by forgetting your password; or the router has problem you can't solve. You can push the reset button for 5 seconds with a stick. The router will reboot and all settings will be restored to factory default settings. If the problem still exists, you can visit our web site to see if there is any firmware for download to solve the problem.



5.5.3 Profile Save

Users can create a backup file that contains current router settings. This backup file can be used to restore router settings. This is specially useful in the event you need to reset the router to its default settings.

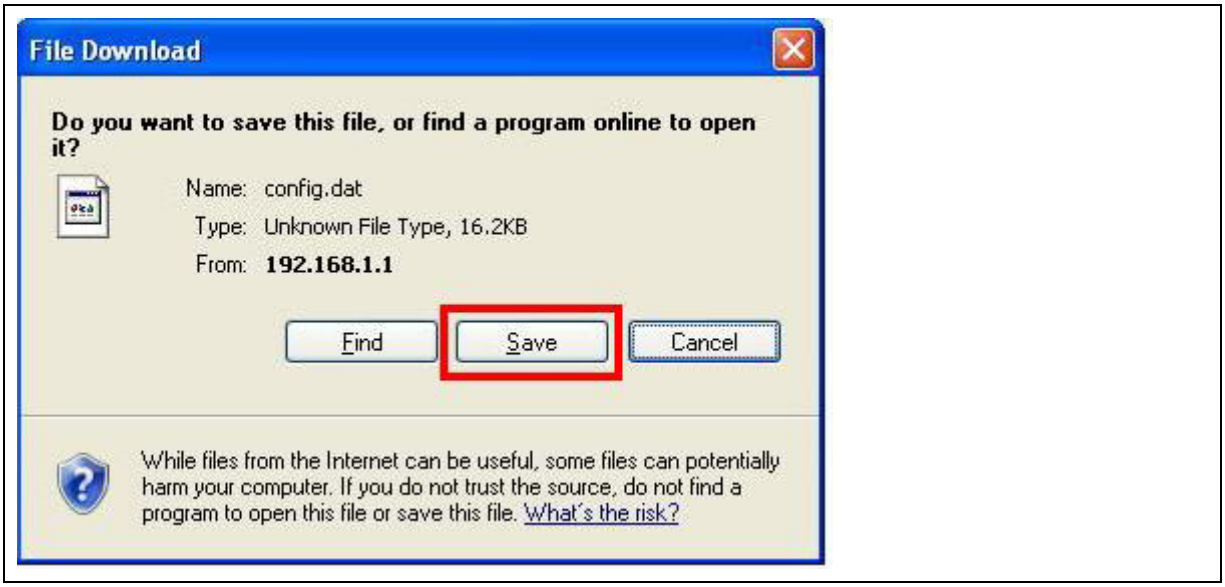

Save/Reload Settings
This page allows you save current settings to a file or reload the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default.
Save Settings to File:
Save...
Save to computer
Load Settings from File:
Browse...
Upload
Upload the file from PC to router
Reset Settings to Default:
Reset
Reset to default.

a. Save Configuration

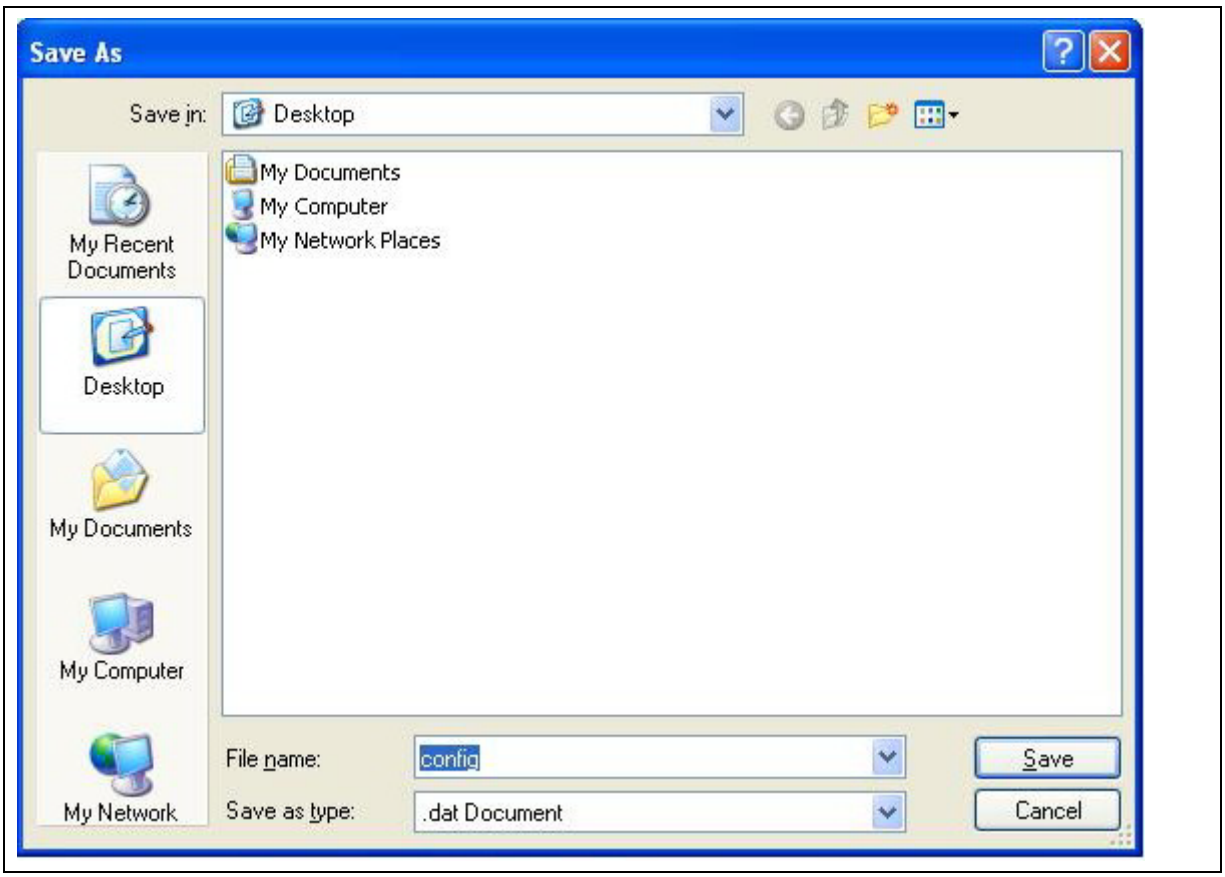
(1) Click **Save**

Save/Reload Settings
This page allows you save current settings to a file or reload the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default.
Save Settings to File:
Save...
Load Settings from File:
Browse...
Upload
Reset Settings to Default:
Reset

(2) Please click “Save” to save the configuration to your computer.

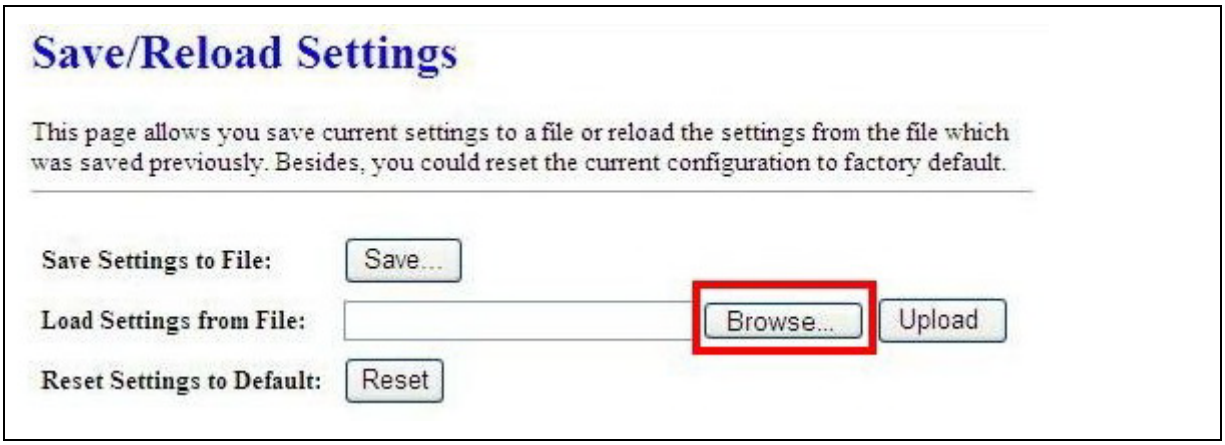

File Download
Do you want to save this file, or find a program online to open it?
Name: config.dat
Type: Unknown File Type, 16.2KB
From: 192.168.1.1
Find
Save
Cancel
While files from the Internet can be useful, some files can potentially harm your computer. If you do not trust the source, do not find a program to open this file or save this file. What's the risk?

(3) Select the location which you want to save file, then click **Save.**

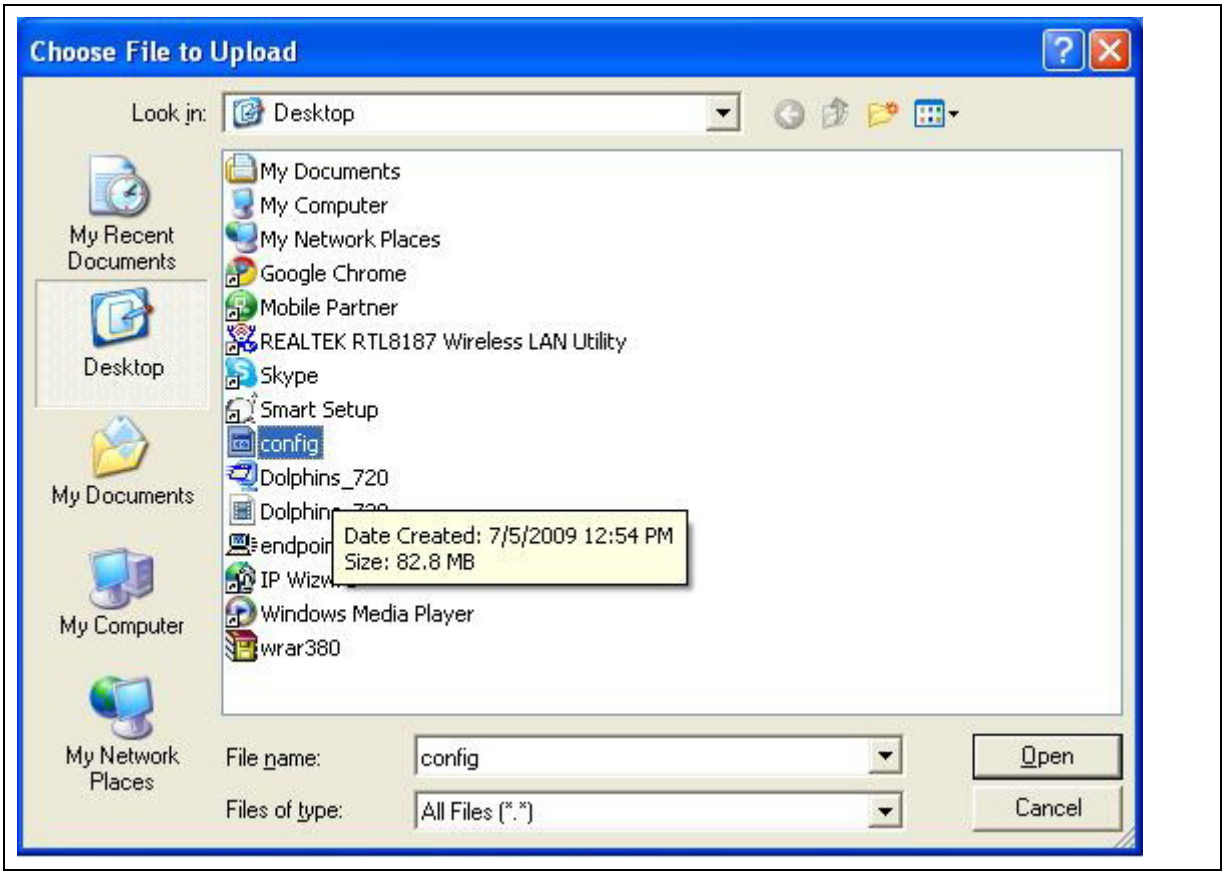


b. Load configuration file

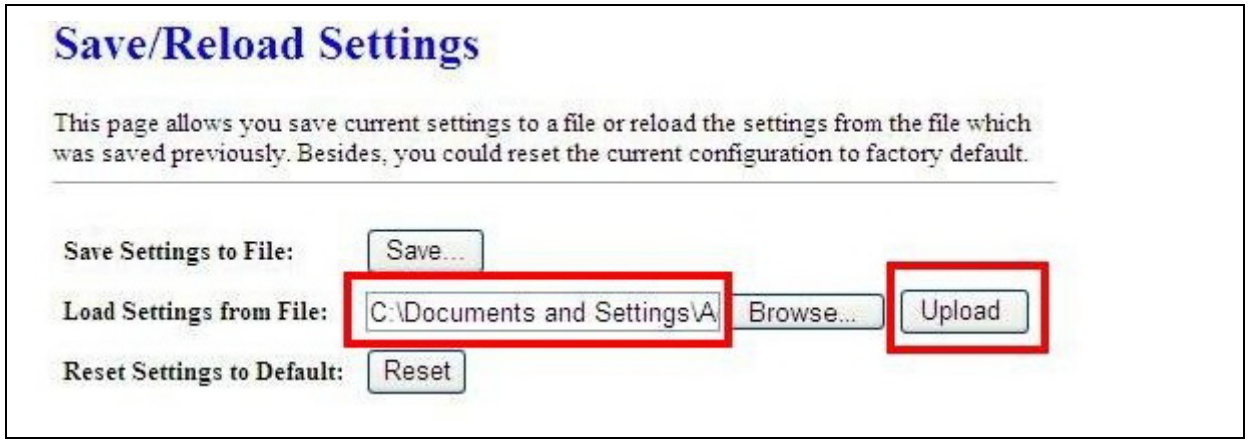
(1) Click **Browser**


Save/Reload Settings
This page allows you save current settings to a file or reload the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default.
Save Settings to File:
Save...
Load Settings from File:
Browse...
Upload
Reset Settings to Default:
Reset

(2) Select configuration file then click **Open**



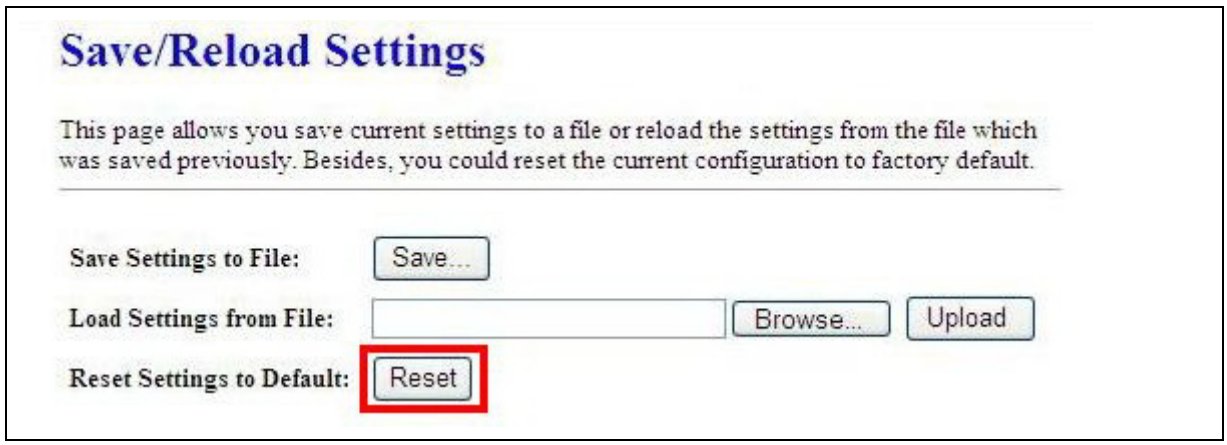
(3) Click **Upload** to upload configuration file to CBR-980.


Save/Reload Settings
This page allows you save current settings to a file or reload the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default.
Save Settings to File:
Save...
Load Settings from File:
C:\Documents and Settings\A
Browse...
Upload
Reset Settings to Default:
Reset

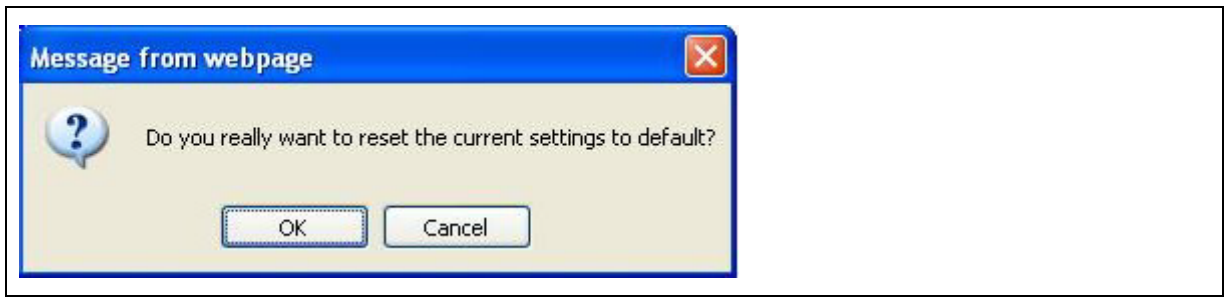
(4) After 90 seconds, CBR-980 will reboot automatically.

(C) Reload factory default setting

1. Please click **Reset**


Save/Reload Settings
This page allows you save current settings to a file or reload the settings from the file which was saved previously. Besides, you could reset the current configuration to factory default.
Save Settings to File:
Save...
Load Settings from File:
Browse...
Upload
Reset Settings to Default:
Reset

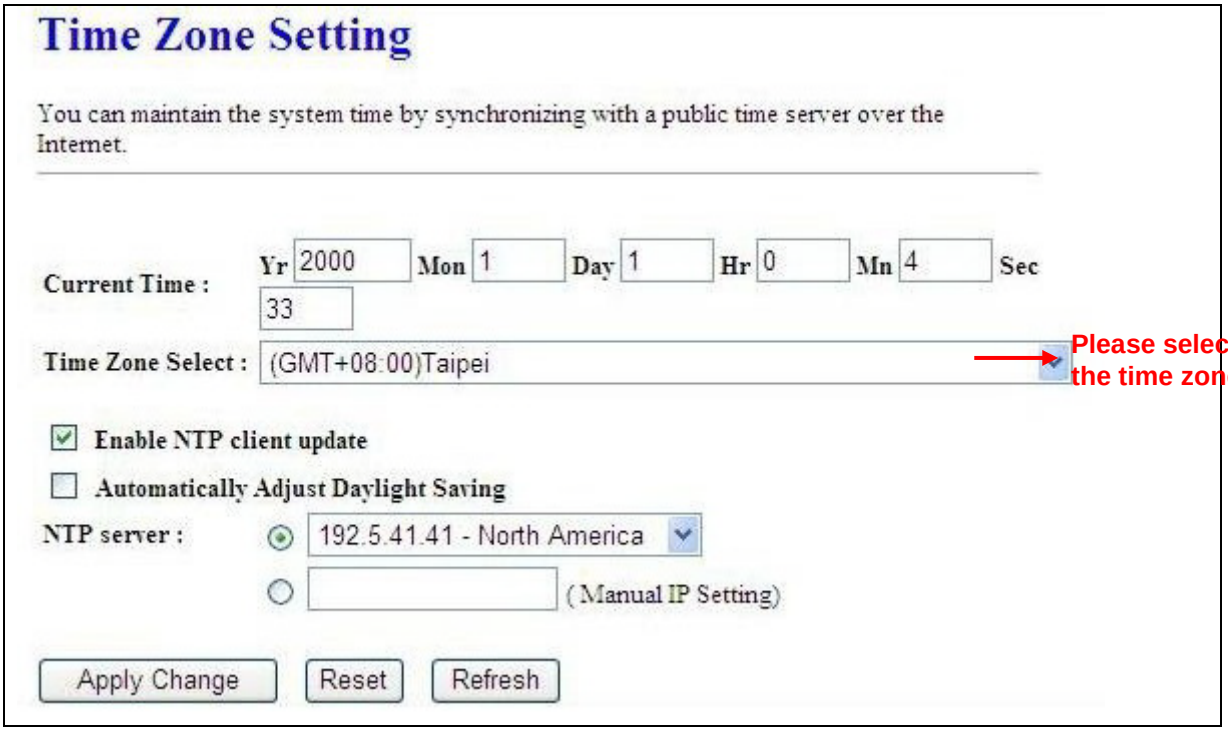
(2) Please click **OK** to start reload factory default setting to CBR-980.



(3) After 90 seconds, CBR-980 will reboot automatically.

5.5.4 Time Zone Setting

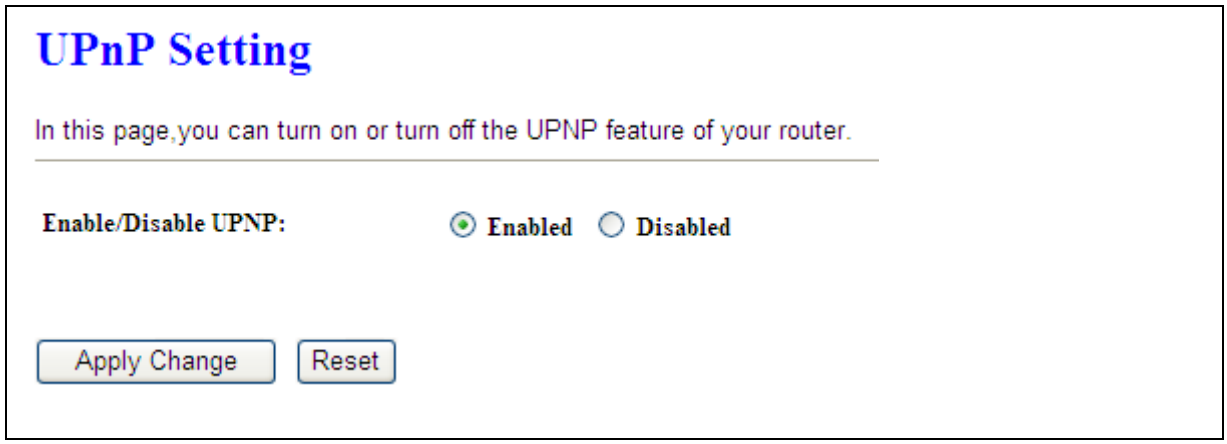
Users can synchronize the local clock on the router to an available NTP server (optional). To complete this setting, enable NTP client update and select the correct Time Zone.


Time Zone Setting
You can maintain the system time by synchronizing with a public time server over the Internet.
Current Time :
Yr 2000 Mon 1 Day 1 Hr 0 Mn 4 Sec 33
Time Zone Select :
(GMT+08:00)Taipei
Please select the time zone
Enable NTP client update
Automatically Adjust Daylight Saving
NTP server :
192.5.41.41 - North America
(Manual IP Setting)
Apply Change
Reset
Refresh

Item	Description
Current Time	Users can input the time manually.
Time Zone Select	Please select the time zone.
Enable NTP client update	Please select to enable NTP client update or not.
Automatically Adjust Daylight Saving	Please select to enable **Automatically Adjust Daylight Saving** or not.
NTP Server	Please select the NTP server from the pull-down list, or you can enter the NTP server IP address manually.
Apply Changes & Reset & Refresh	Please click on **Apply Changes** to save the setting data. Or you may click on **Reset** to clear all the input data. Or you may click on **Refresh** to update the system time on the screen.

5.5.5 UPnP Setting

Universal Plug and Play (**UPnP**) is a standard of networking protocols promulgated by the UPnP Forum. The goals of UPnP are to allow devices to connect seamlessly and to simplify the implementation of networks in the home (data sharing, communications, and entertainment) and in corporate environments for simplified installation of computer components. CBR-980 supports UPnP function, and can cooperate with other UPnP devices. When you activate UPnP, please click **My Network Places**. Users will see an **Internet Gateway Device** icon. By click the icon, users can enter the GUI of 3.5G server router. If you do not wish to use UPnP, you can disable it.

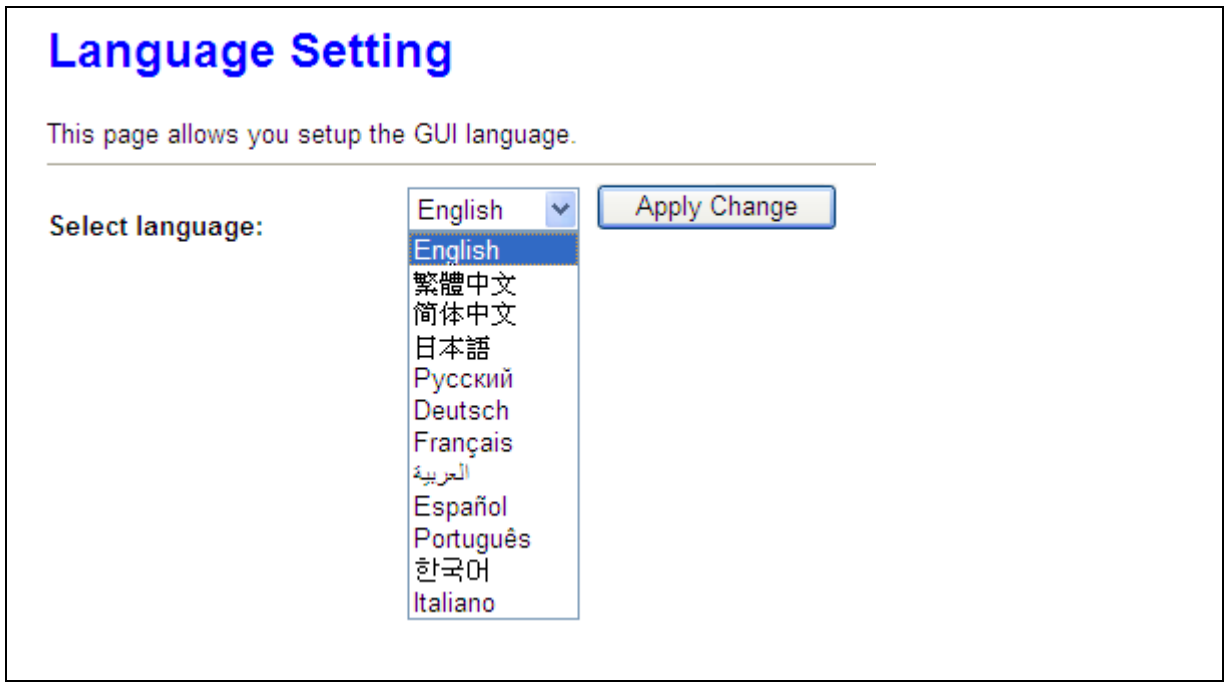


*Enable/Disable UPnP

Select to enable or disable this function.

5.5.6 Language Setting

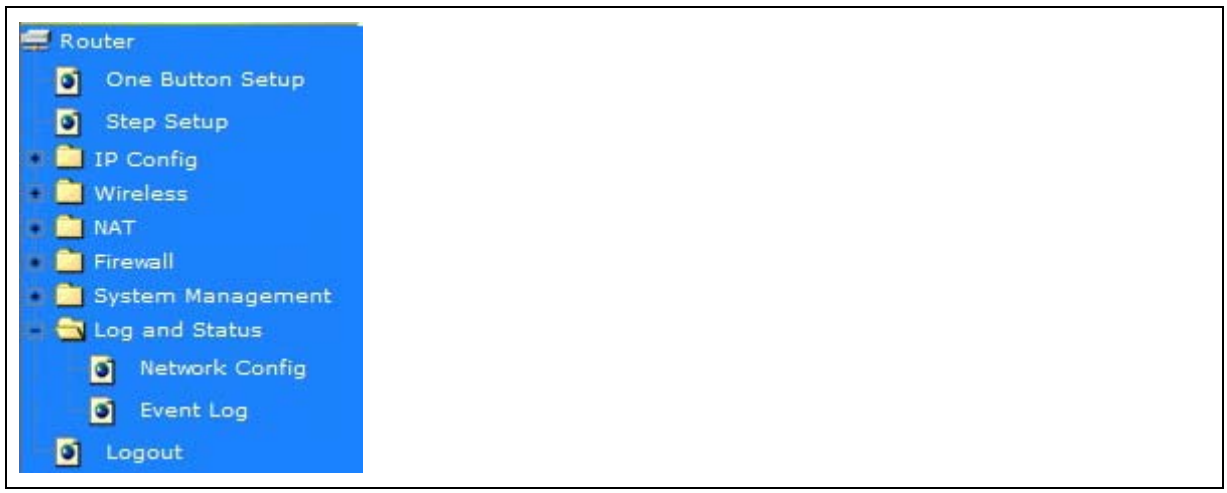
CBR-980 provides users with 12 languages to choose. Users can change the language of the interface configuration. Please click **Apply Changes** after selecting a language.



Using Korean as an example, the screen will display on the chosen language as below.

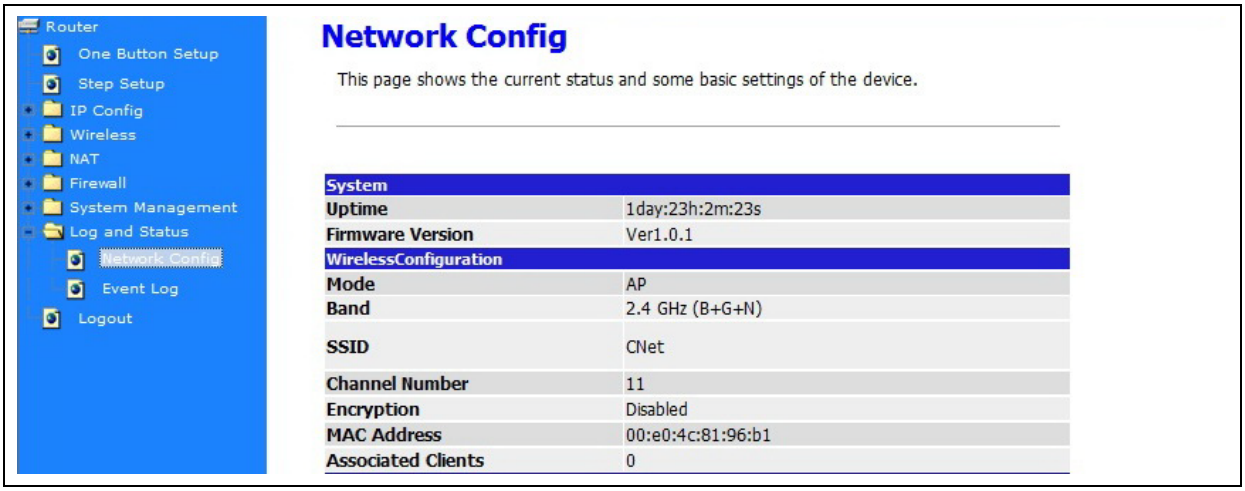
5.6 Log & Status

The category provides **Network Config** and **Event Log** status for users to know the operation status.



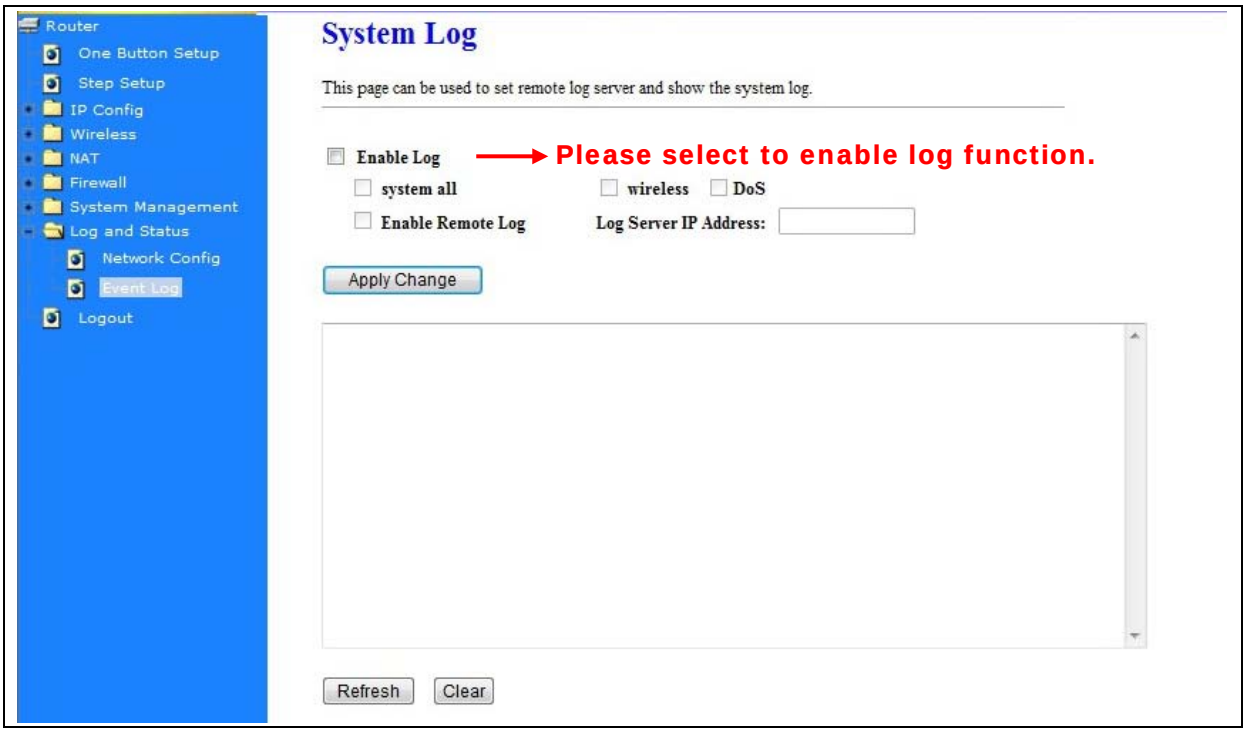
5.6.1 Network Config

Users can check the Internet status under this category, including Firmware version, Wireless setting, Connecting Time, WAN, TCP/IP …information from this page.



5.6.2 Event Log

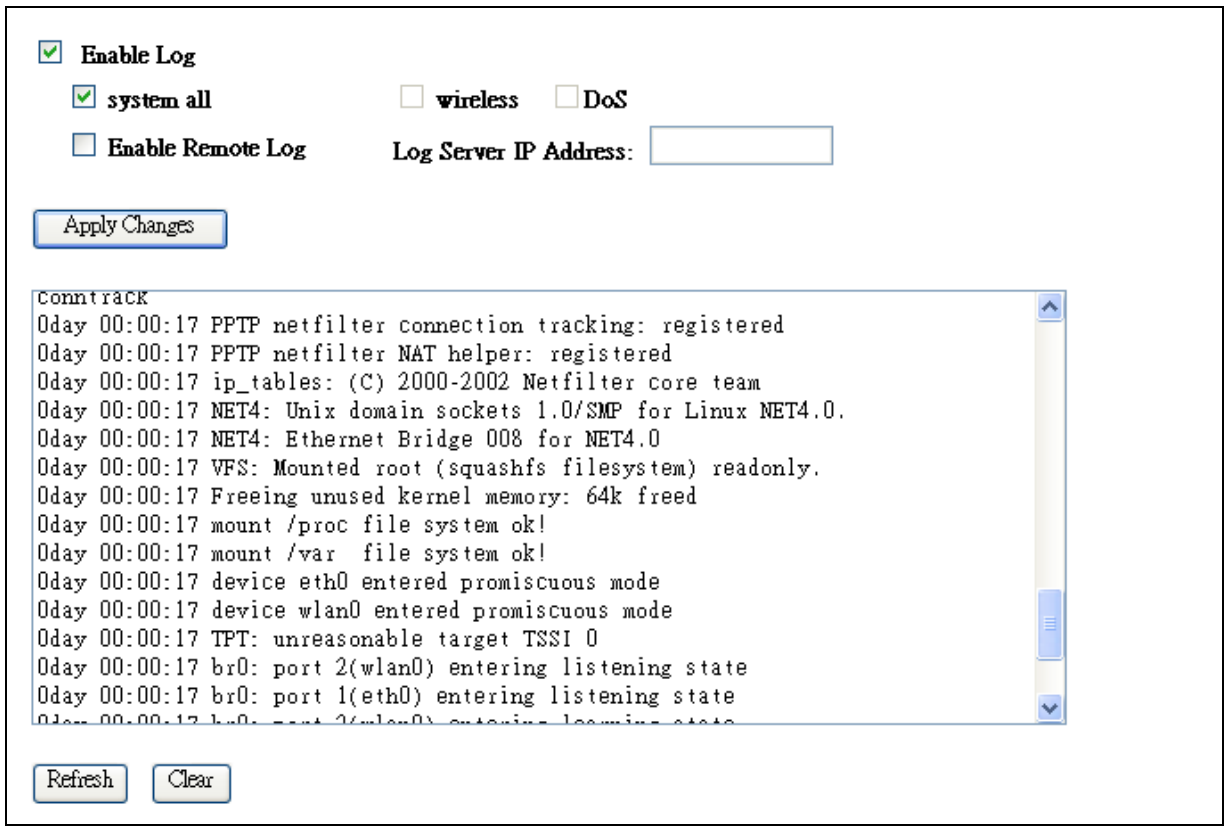
You could enable the event log feature here.



Item	Description
Enable Log	You may choose to enable Event Log or not
System all, Wireless, DoS	Please select the event you want to record.
Enable Remote Log	You may choose to enable the remote event log or not.
Log Server IP Address	Please input the log server IP Address.

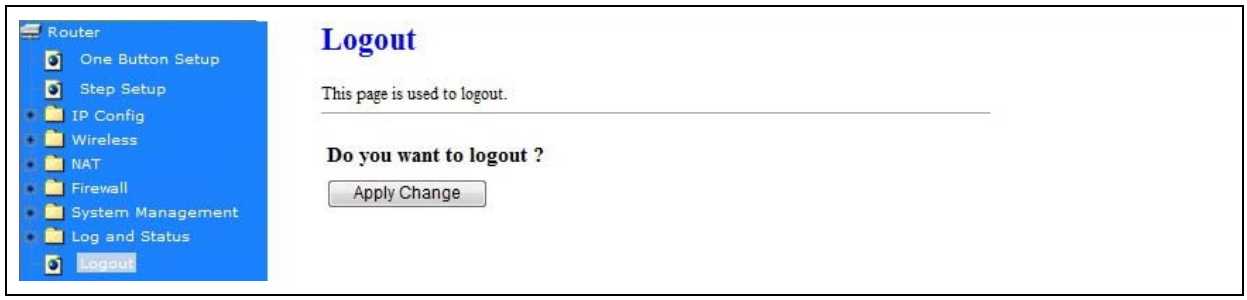
Apply & Cancel	Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clean the setting on this page.

*The following figure is an example when users click **Apply Changes** to record the event log.


Enable Log
system all
wireless
DoS
Enable Remote Log
Log Server IP Address:
Apply Changes
Conntrack
0day 00:00:17 PPTP netfilter connection tracking: registered
0day 00:00:17 PPTP netfilter NAT helper: registered
0day 00:00:17 ip_tables: (C) 2000-2002 Netfilter core team
0day 00:00:17 NET4: Unix domain sockets 1.0/SMP for Linux NET4.0.
0day 00:00:17 NET4: Ethernet Bridge 008 for NET4.0
0day 00:00:17 VFS: Mounted root (squashfs filesystem) readonly.
0day 00:00:17 Freeing unused kernel memory: 64k freed
0day 00:00:17 mount /proc file system ok!
0day 00:00:17 mount /var file system ok!
0day 00:00:17 device eth0 entered promiscuous mode
0day 00:00:17 device wlan0 entered promiscuous mode
0day 00:00:17 TPT: unreasonable target TSSI 0
0day 00:00:17 br0: port 2(wlan0) entering listening state
0day 00:00:17 br0: port 1(eth0) entering listening state
Refresh
Clear

5.7 Logout

This function provides users to logout.

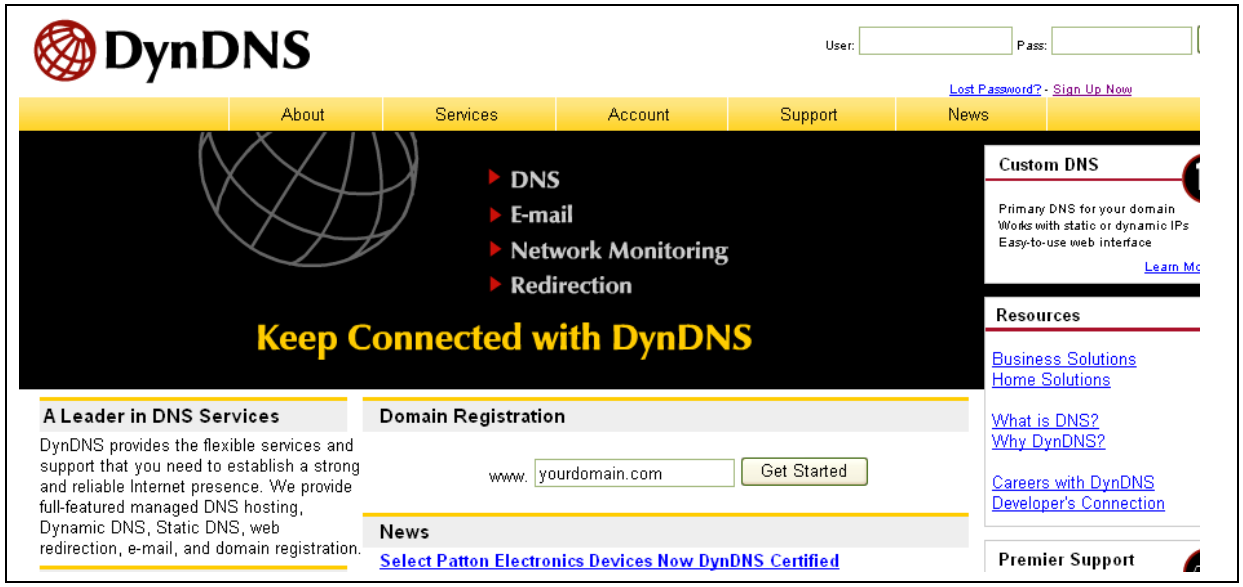


Chapter 6 DDNS Account Setup

You can assign a fixed host and domain name to a dynamic Internet IP address. Each time the router boots up, it will re-register its domain-name-to-IP-address mapping with the DDNS service provider. This is the way Internet users can access the router through a domain name instead of its IP address.

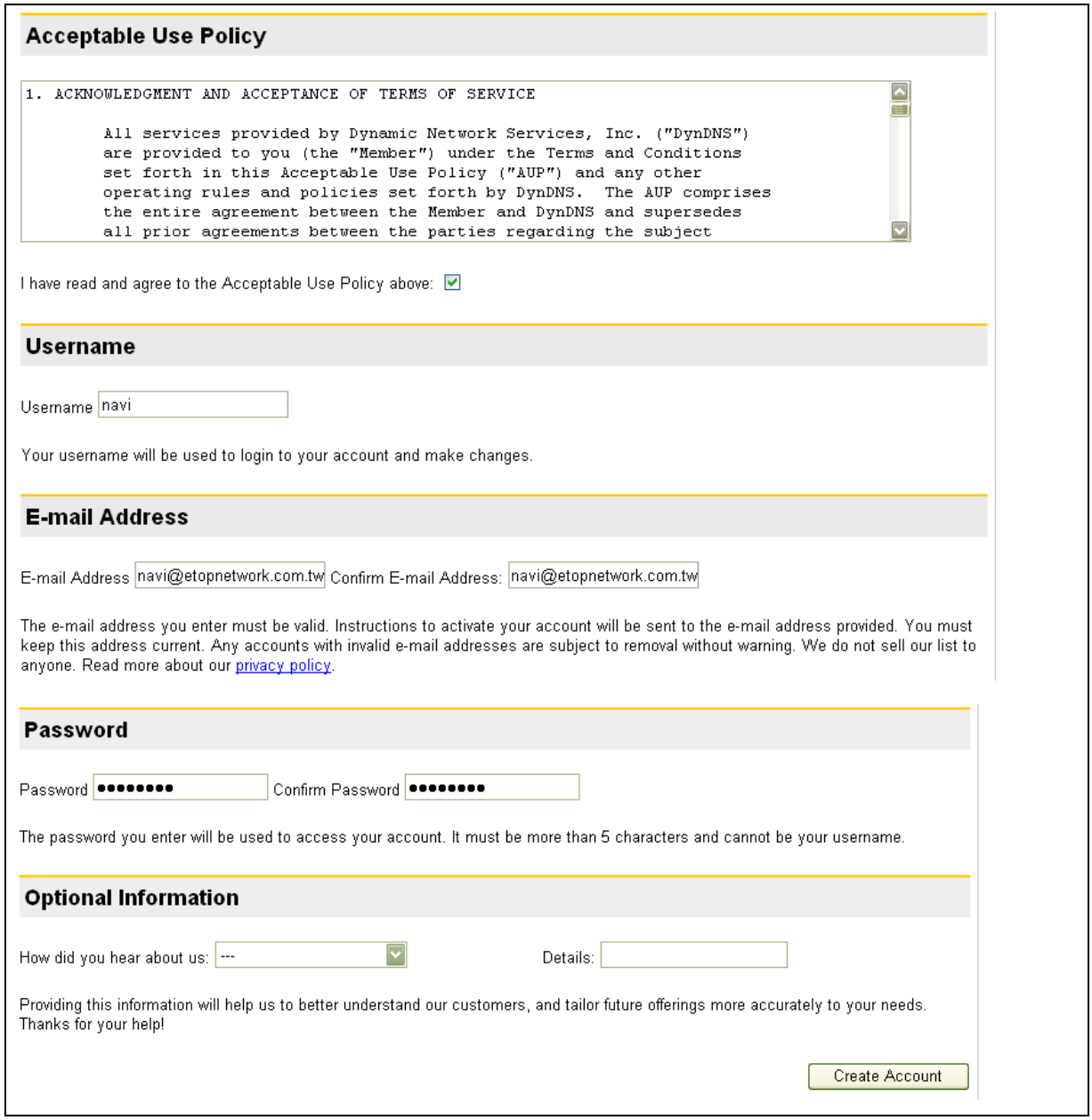
【Step 1】

Please visit the website http://www.dyndns.com/, and click on **Sign Up Now**.



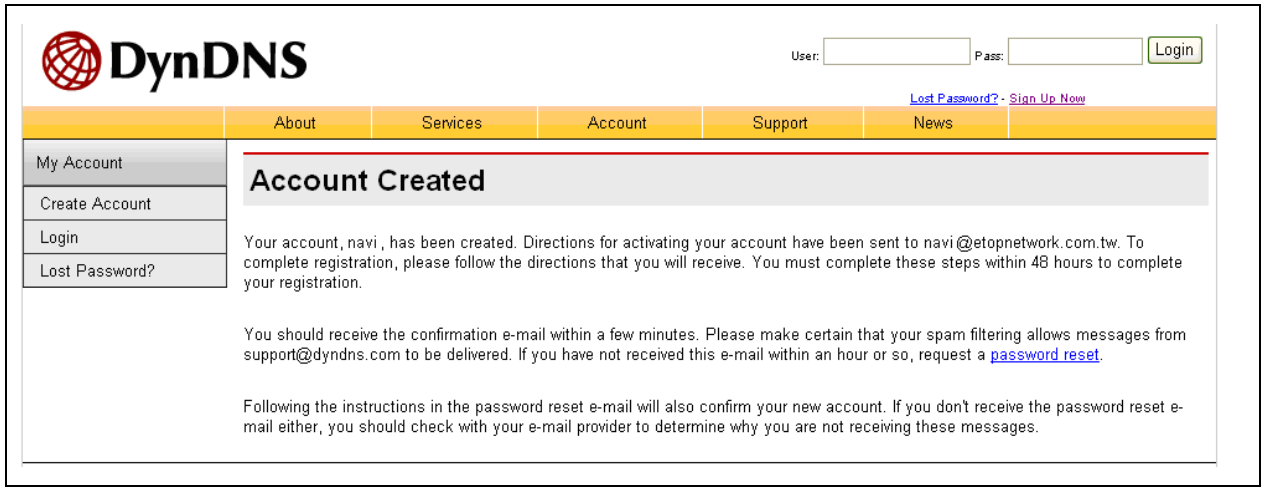
【Step 2】

Please fulfill the requested information at the column, and click on **Create Account** when finished. (The information shown on the screen is for your reference only)


Acceptable Use Policy
1. ACKNOWLEDGMENT AND ACCEPTANCE OF TERMS OF SERVICE
All services provided by Dynamic Network Services, Inc. ("DynDNS")
are provided to you (the "Member") under the Terms and Conditions
set forth in this Acceptable Use Policy ("AUP") and any other
operating rules and policies set forth by DynDNS. The AUP comprises
the entire agreement between the Member and DynDNS and supersedes
all prior agreements between the parties regarding the subject
I have read and agree to the Acceptable Use Policy above:
Username
Username navi
Your username will be used to login to your account and make changes.
E-mail Address
E-mail Address navi@etopnetwork.com.tw Confirm E-mail Address: navi@etopnetwork.com.tw
The e-mail address you enter must be valid. Instructions to activate your account will be sent to the e-mail address provided. You must keep this address current. Any accounts with invalid e-mail addresses are subject to removal without warning. We do not sell our list to anyone. Read more about our privacy policy.
Password
Password Confirm Password
The password you enter will be used to access your account. It must be more than 5 characters and cannot be your username.
Optional Information
How did you hear about us: ---
Details:
Providing this information will help us to better understand our customers, and tailor future offerings more accurately to your needs.
Thanks for your help!
Create Account

【Step 3】

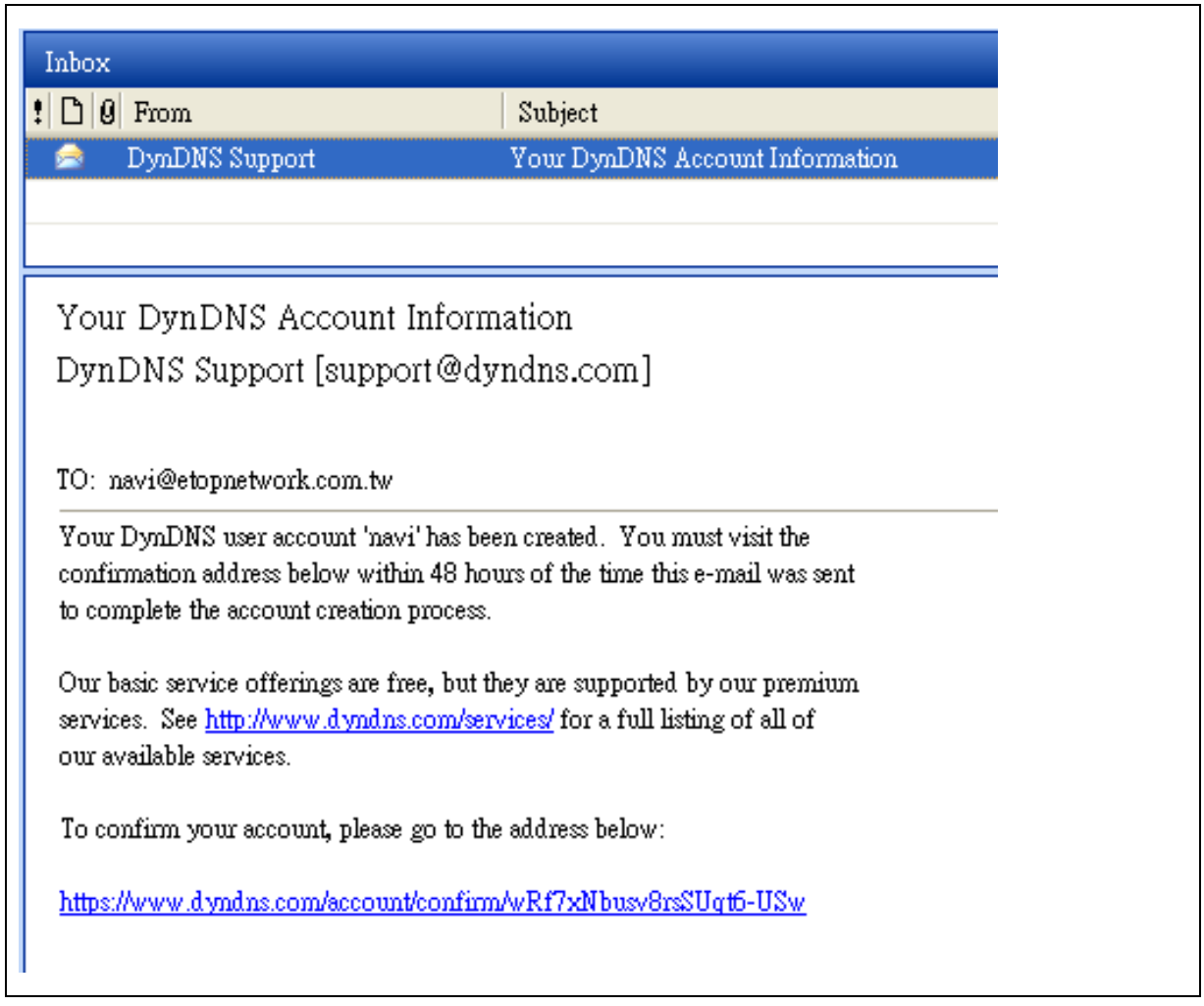
When the below window appears, you already finish the registration. Please check your E-mail box, and you will receive an e-mail from the DynDNS.


DynDNS
User:
Pass:
Login
Lost Password? - Sign Up Now
About
Services
Account
Support
News
My Account
Create Account
Login
Lost Password?
Account Created
Your account, navi , has been created. Directions for activating your account have been sent to navi @etopnetwork.com.tw. To complete registration, please follow the directions that you will receive. You must complete these steps within 48 hours to complete your registration.
You should receive the confirmation e-mail within a few minutes. Please make certain that your spam filtering allows messages from support@dyndns.com to be delivered. If you have not received this e-mail within an hour or so, request a password reset.
Following the instructions in the password reset e-mail will also confirm your new account. If you don't receive the password reset e-mail either, you should check with your e-mail provider to determine why you are not receiving these messages.

【Step 4】

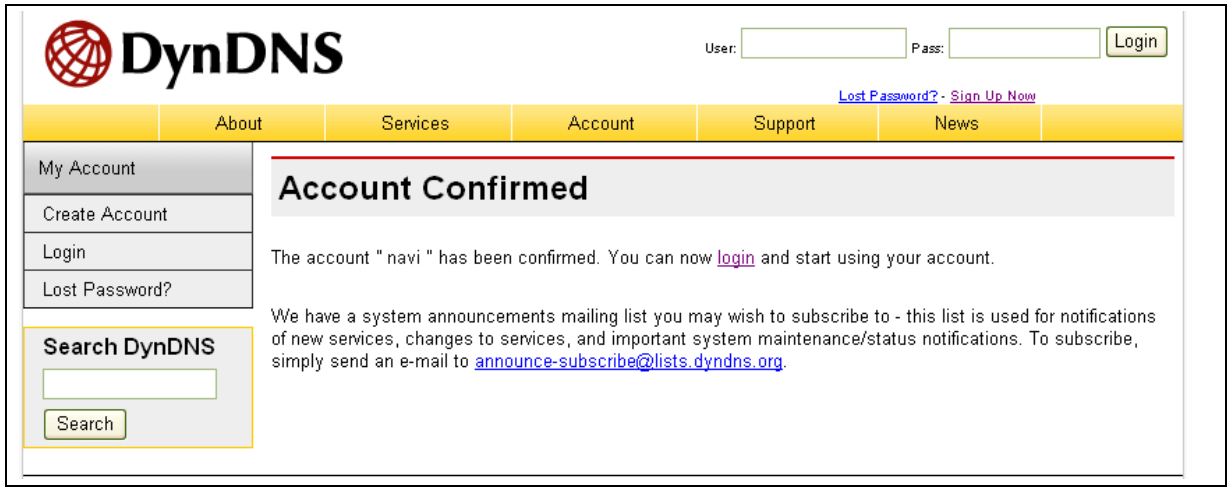
Please open the email sent from DynDNS.

Click on the link to confirm your account.


Inbox
From
Subject
DynDNS Support
Your DynDNS Account Information
Your DynDNS Account Information
DynDNS Support [support@dyndns.com]
TO: navi@etopnetwork.com.tw
Your DynDNS user account 'navi' has been created. You must visit the confirmation address below within 48 hours of the time this e-mail was sent to complete the account creation process.
Our basic service offerings are free, but they are supported by our premium services. See http://www.dyndns.com/services/ for a full listing of all of our available services.
To confirm your account, please go to the address below:
https://www.dyndns.com/account/confirm/wRf7xNbusv8rsSUqt6-USw

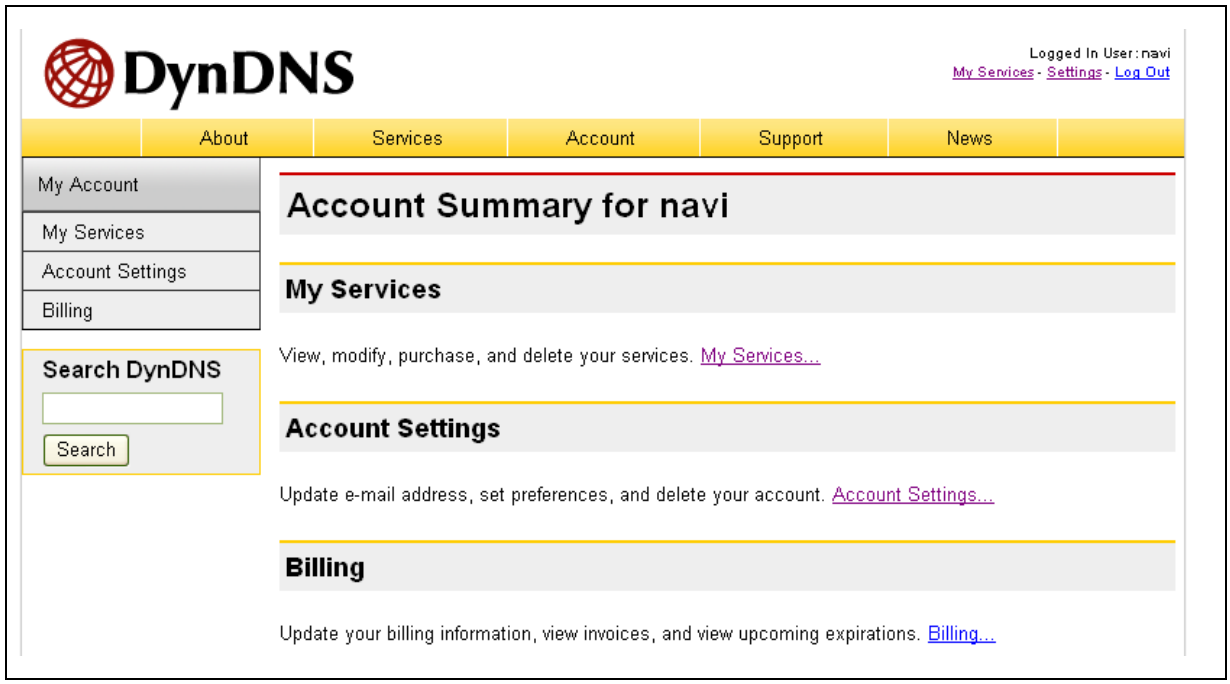
【Step 5】

Please click on **login**.


DynDNS
User:
Pass:
Login
Lost Password? - Sign Up Now
About
Services
Account
Support
News
My Account
Create Account
Login
Lost Password?
Search DynDNS
Search
Account Confirmed
The account " navi " has been confirmed. You can now login and start using your account.
We have a system announcements mailing list you may wish to subscribe to - this list is used for notifications of new services, changes to services, and important system maintenance/status notifications. To subscribe, simply send an e-mail to announce-subscribe@lists.dyndns.org.

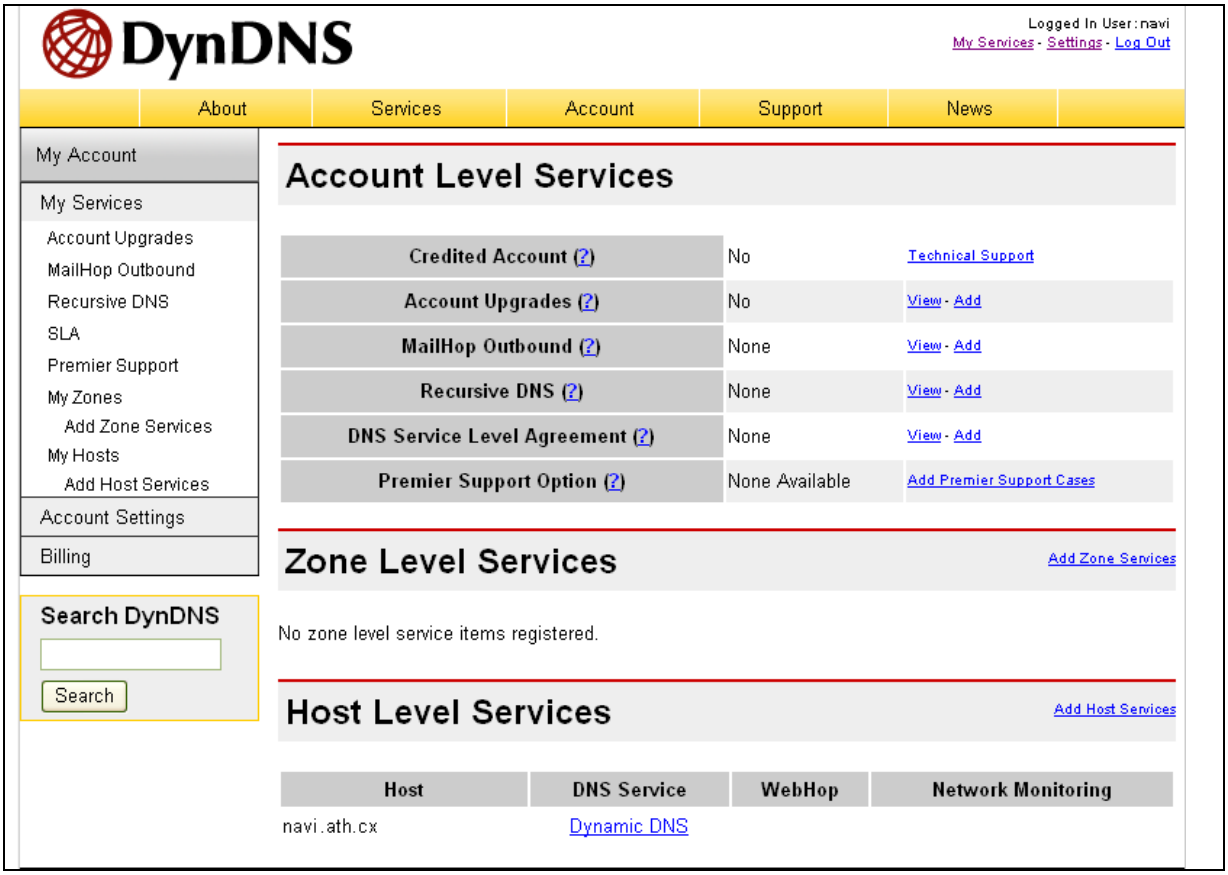
【Step 6】

Please click on **My Services** under the Account Summary for the linkage.



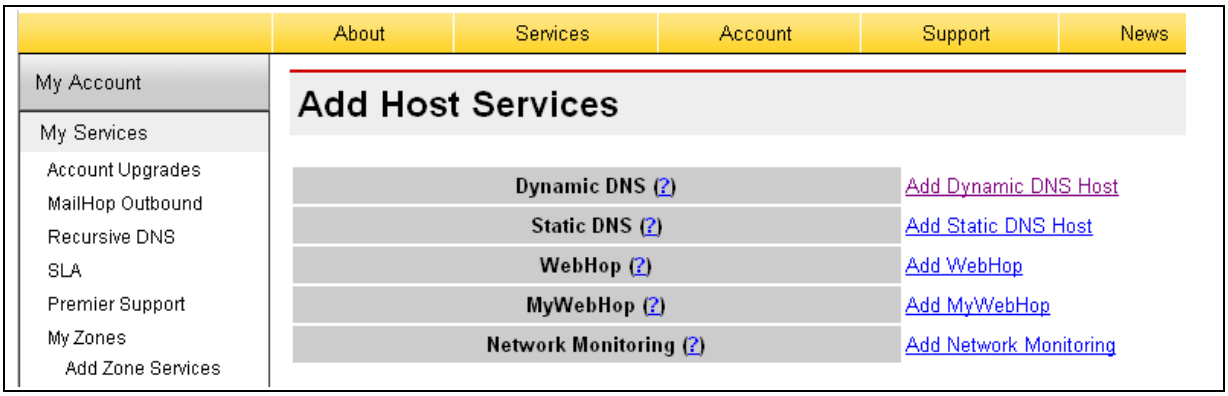
【Step 7】

Please click on **Add Host Services**.



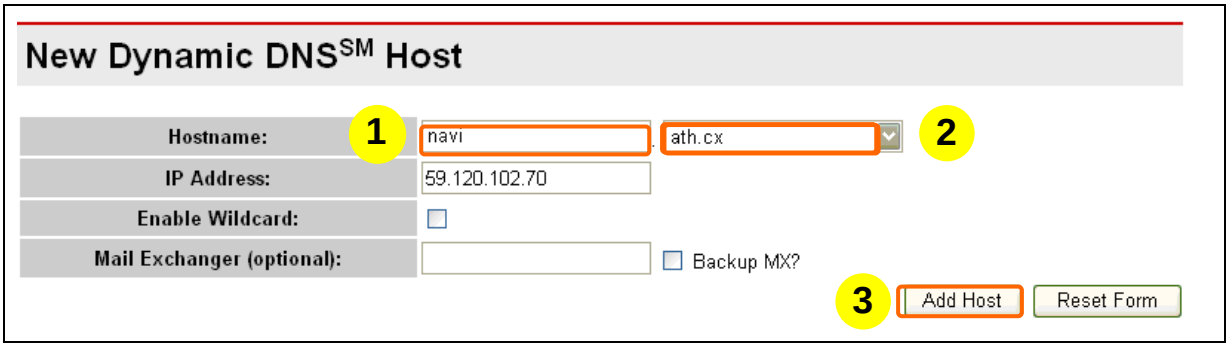
【Step 8】

Please click on **Add Dynamic DNS Host**.



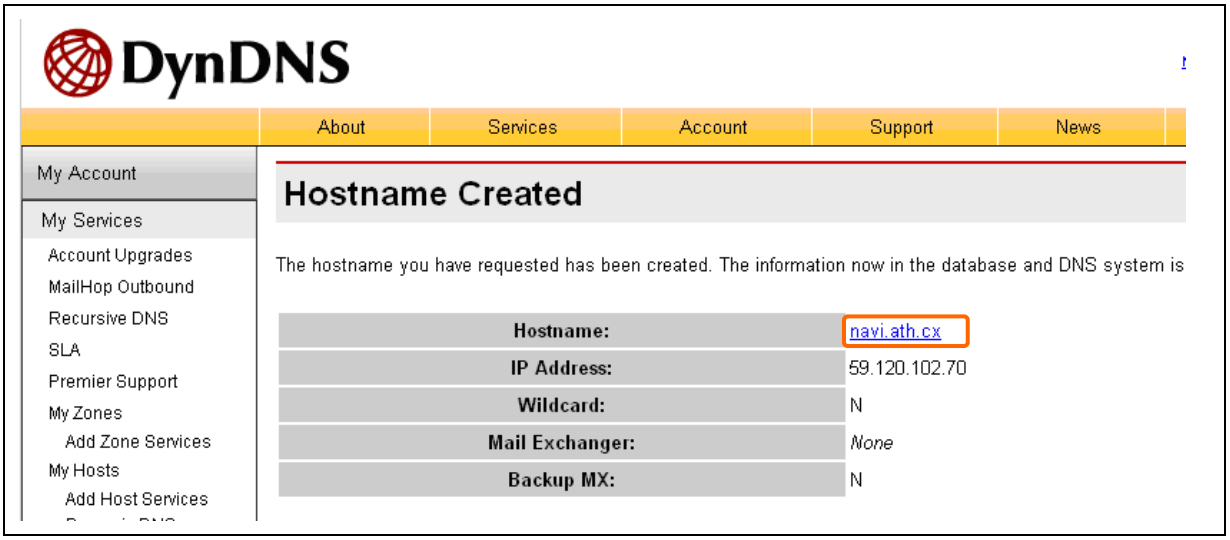
【Step 9】

1. Please input the account you applied.
2. Please select the hostname preferred at the drop-down menu.
3. Please click on **Add Host** to add the name.



【Step 10】

When the below window appears, it means your hostname is created.



Chapter 7 Q & A

7.1 Installation

1. Q: Where is the XDSL Router installed on the network?

A: In a typical environment, the Router is installed between the XDSL line and the LAN. Plug the XDSL Router into the XDSL line on the wall and Ethernet port on the Hub (switch or computer).

2. Q: Why does the throughput seem slow?

A: To achieve maximum throughput, verify that your cable doesn't exceed 100 meter. If you have to do so, we advise you to purchase a bridge to place it in the middle of the route in order to keep the quality of transmitting signal. Out of this condition you would better test something else.

- Verify network traffic does not exceed 37% of bandwidth.
- Check to see that the network does not exceed 10 broadcast messages per second.
- Verify network topology and configuration.

7.2 LED

1. Why doesn't 11n Broadband Router power up?

A: Check if the output voltage is suitable, or check if the power supply is out of order.

2. The Internet browser still cannot find or connect to 11n Broadband Router after verifying the IP address and LAN cable, the changes cannot be made, or password is lost.

A: In case 11n Broadband Router is inaccessible, you can try to restore its factory default settings. Please press the "Reset" button and keep it pressed for over 7 seconds and the light of STATUS will vanish. The LEDs will flash again when reset is successful.

3. Why does 11n Broadband Router shut down unexpectedly?

A: Re-plug your power adapter. Then, check the STATUS indicator; if it is off, the internal flash memory is damaged. For more help, please contact with your provider.

7.3 IP Address

1. Q: What is the default IP address of the router for LAN port?

A: The default IP address is 192.168.1.1 with subnet mask 255.255.255.0

2. Q: I don't know my WAN IP.

A: There are two ways to know.

Way 1: Check with your Internet Service Provider.

Way 2: Check the setting screen of 11n Broadband Router. Click on **Status & Log** item to select **Network Configuration** on the Main Menu. WAN IP is shown on the WAN interface.

3. How can I check whether I have static WAN IP Address?

A: Consult your ISP to confirm the information, or check Network Configuration in 11n Broadband Router's Main Menu.

4. Will the Router allow me to use my own public IPs and Domain, or do I have to use the IPs provided by the Router?

A: Yes, the Router mode allows for customization of your public IPs and Domain.

7.4 OS Setting

1. Why can't my computer work online after connecting to 11n Broadband Router?

A: It's possible that your Internet protocol (TCP/IP) was set to use the following IP address. Please do as the following steps. (Windows 2000 & XP) **Start**＞**Settings**＞ **Network and Dial-up Connections**＞double click on **Internet Protocol(TCP/IP)** ＞select **obtain IP address automatically**＞ Click on **OK** button. Then, open Internet browser for testing. If you still can't go online, please test something else below.

- Verify network configuration by ensuring that there are no duplicate IP addresses.
- Power down the device in question and ping the assigned IP address of the device. Ensure no other device responds to that address.

1. Check that the cables and connectors or use another LAN cable.

2. Q: Web page hangs, corrupt downloads, or nothing but junk characters is being

displayed on the screen. What do I need to do?

A: Force your NIC to 10Mbps or half duplex mode, and turn off the "Auto-negotiate" feature of your NIC as a temporary measure. (Please look at the Network Control Panel, in your Ethernet Adapter's Advanced Properties tab.)

3. Q: Why can't I connect to the Web Configuration?

A: you can remove the proxy server settings in your web browser.

7.5 11n Broadband Router Setup

1. Q: Why does 11n Broadband Router's setup page shut down unexpectedly?

A: If one of the pages appears incompletely in 11n Broadband Router's setup pages, please click on Logout item on the Main Menu before shutting it down. Don't keep it working. Then, close Internet browser and open it again for going back to the previous page.

2. Q: Why can't my USB devices and LAN ports work properly after setting the DHCP?

A: There are two rules over here.

Rule1: After connecting USB devices, please reboot your Router.

Rule2: Before finishing the DHCP setup, please don't connect any computer to LAN ports, because the conflict of having the same IP may occur and cause some computers a lot of trouble.

※Notice: Make sure that you always click on the Apply button after configuring each setting. And in order to let other LAN ports work properly, please reboot your PC.

3. Q: I don't know how to configure DHCP.

A: DHCP is commonly used in the large local network. It allows you to manage and distribute IP addresses from 2 to 254 throughout your local network via 11n Broadband Router. Without DHCP, you would have to configure each computer separately. It's very troublesome. Please Open **Internet browser** > Input **192.168.1.1 in the website blank field** > Select **DHCP Server under** the **IP Config Menu**. For more information, please refer to 3.3.2 (Router Mode) or 4.3.1 (AP Mode).

4. Q: How do I upgrade the firmware of 11n Broadband Router?

A: Periodically, a new Flash Code is available for 11n Broadband Router on your product supplier's website. Ideally, you should update 11n Broadband Router's Flash Code using **Upgrade Firmware** on the **System Management** menu of 11n Broadband Router Settings.

5. Q: My **11N Broadband Router** cannot connect to the ISP?

A: There are three possible solutions.

1. Check the Cable/XDSL modem is power on.
2. Check the Cable/XDSL link light is on to verify a good physical connection.
3. Check the WAN port LED to verify if the Cable/XDSL modem is connected to the router:

If your ISP Login method is following, please make sure the username and password are correct or not.

If your ISP is using dynamic IP addressing (DHCP) then the DHCP protocol does not have the authentication feature. Some Cable service providers often use the following to determine user's identification.

6. Q: Why is that I can ping to outside hosts, but cannot access Internet websites?

A: Check the DNS server settings on your PC. You should get the DNS servers settings from your ISP. If your PC is running a DHCP client, remove any DNS IP address setting. As the router assign the DNS settings to the DHCP-client-enabled PC.

7. Q: 11n Broadband Router couldn't save the setting after click on Apply button?

A: 11n Broadband Router will start to run after the setting finished applying, but the setting isn't written into memory. Here we suggest if you want to make sure the setting would be written into memory, please reboot the device via **Reboot** under **System Management** directory**.**

7.6 Wireless LAN

1. Q: Why couldn’t my wireless notebook work on-line after checking?

A: Generally, Wireless networks can sometimes be very complicated to set up, particularly if you're dealing with encryption and products from different vendors. Any number of variables can keep your workstations from talking to each other. Let's go over some of more common ones.

For starters, verify that your router and your workstation are using the same SSID descriptions. SSID acts as a password when a mobile device tries to connect to the wireless network. The SSID also differentiates one WLAN from another, so all access points and all devices attempting to connect to a specific WLAN must use the same SSID. A workstation will not be permitted to connect to the network unless it can provide this unique identifier. This is similar to the function of your network's Workgroup or Domain name.

When you're experiencing conductivity problems, it is always best to keep things simple. So next you are going to do is that, please disable any WEP encryption you might have configured.

Successful implementation of encryption also includes the use of a shared key. A HEX key is the most common, but other formats are also used. This key identifies the workstation to the router as a trusted member of this network. Different manufacturers can implement this key technology in ways that might prevent them from working correctly with another vendor's products. So pay attention to detail is going to be the key to a successful installation.

Next make sure the router and the NIC are configured to use the same communications channel. There are normally 11 of them, and the default channel can also vary from vendor to vendor. You might also want to confirm that the router has DHCP services enabled and an address pool configured. If not, the NIC won't be able to pick up an IP address. I have run across a few access points that offer DHCP services but do not assign all of the needed IP information to the NIC. As a result, I was able to connect to the network, but could not browse the web. The point is, don't assume anything. Verify for yourself that all of the required settings are being received by the workstation.

Finally, you might want to keep the system you're trying to configure in the same room as the router, at least during the initial configuration, in order to minimize potential interference from concrete walls or steel beams.

2. Q: My PC can't locate the Wireless Access Point.

A: Check the following:

- Your PC is set to Infrastructure Mode. (Access Points are always in Infrastructure Mode.)
- The SSID on your PC and the Wireless Access Point are the same. Remember that the SSID is case-sensitive. So, for example "Workgroup" does NOT match "workgroup".
- Both your PC and the Wireless Access Point must have the same setting for WEP. The default setting for the Wireless Router is disabled, so your wireless station should also have WEP disabled.
- If WEP is enabled on the Wireless Router, your PC must have WEP enabled, and the key must match.
- If the Wireless Router's Wireless screen is set to Allow LAN access to selected Wireless Stations only, then each of your Wireless stations must have been selected, or access will be blocked.
- To see if radio interference is causing a problem, see if connection is possible when close to the Wireless Access Point. Remember that the connection range can be as little as 100 feet in poor environments.

3. Q: Wireless connection speed is very slow.

A: The wireless system will connect at highest possible speed, depending on the distance and the environment. To obtain the highest possible connection speed, you can experiment with following:

- Access Point location: Try adjusting the location and orientation of the Access Point.
- Wireless Channel: If interference is the problem, changing to another channel may show a marked improvement.
- Radio Interference: Other devices may be causing interference. You can experiment by switching other devices off, and see if this helps. Any "noisy" devices should be shielded or relocated.
- RF Shielding: Your environment may tend to block transmission between the wireless stations. This will mean high access speed is only possible when close to the Access Point.

4. Q: Some applications do not run properly when using the Wireless Router.

A: The Wireless Router processes the data passing through it, so it is not transparent. Use the Special Application feature to allow the use of Internet applications which do not function correctly. If this does solve the problem, you can use the DMZ function. This should work with almost every application, but:

- It is a security risk, since the firewall is disabled.
- Only one (1) PC can use this feature.

5. Q: I can't connect to the Wireless Router to configure it.

A: Check the following:

- The Wireless Router is properly installed, LAN connections are OK, and it is powered ON.
- Make sure that your PC and the Wireless Router are on the same network segment.
- If your PC is set to "Obtain an IP Address automatically" (DHCP client), restart it.
- If your PC uses a Fixed (Static) IP address, make sure that it is using an IP Address within the range 192.168.1.129 to 192.168.1.253 and thus compatible with the Wireless Router's default IP Address of 192.168.1.254. Also, the Network Mask should be set to 255.255.255.0 to match the Wireless Router. In Windows, you can check these settings by using Control Panel ~ Network to check the Properties for the TCP/IP protocol.

6. Q: The WinXP wireless interface couldn't communicate the WEP with 11n Broadband Router's wireless interface.

A: The default WEP of WinXP is **Authentication Open System - WEP**, but the WEP of 11n Broadband Router is only for **Shared Key - WEP**, it caused both sides couldn't communicate. Please select the WEP of WinXP from Authentication Open System to **Pre-shared Key - WEP**, and then the WEP wireless interface between WinXP and 11n Broadband Router would be communicated.

7.7 Support

1. Q: What is the maximum number of IP addresses that the XDSL Router will support?

A: The Router will support to 253 IP addresses with NAT mode.

5. Q: Is the Router cross-platform compatible?

A: Any platform that supports Ethernet and TCP/IP is compatible with the Router.

7.8 Others

1. Q: Why can't I receive corrupted FTP downloads?

A: If you are experiencing corrupted files when you download a file with your FTP client, try using another FTP program.

2. Q: Why does the router dial out for PPPoE mode very often?

A: Normally some of game, music or anti-virus program will send out packets that trigger the router to dial out, you can close these programs. Or you can set the idle time to 0, then control to dial out manually.

3. Q: What can I do if there is already a DHCP server in LAN?

A: If there are two DHCP servers existing on the same network, it may cause conflict and generate trouble. In this situation, we suggest to disable DHCP server in router and configure your PC manually.

7.9 USB Device

1. Q: How many USB devices can be connected to the Product?

A: 11n Broadband Router supports maximum of 1 USB ports.